**2014 - 2015 IMPORTANT DATES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advising Begins</td>
<td>May 5</td>
<td>May 5</td>
<td>Nov 3</td>
<td>Feb 9</td>
<td>May 4</td>
</tr>
<tr>
<td>Advising Day (most day classes cancelled)</td>
<td>May 13</td>
<td>May 13</td>
<td>Nov 19</td>
<td>Feb 25</td>
<td>May 13</td>
</tr>
<tr>
<td>Returning student registration begins</td>
<td>May 19</td>
<td>May 19</td>
<td>Dec 1</td>
<td>Mar 2</td>
<td>May 18</td>
</tr>
<tr>
<td>New student registration begins</td>
<td>Jun 2</td>
<td>Jun 13*</td>
<td>Dec 8</td>
<td>Mar 9</td>
<td>Jun 3</td>
</tr>
<tr>
<td>Tuition due</td>
<td>Jun 16</td>
<td>Sep 12</td>
<td>Dec 29</td>
<td>Mar 20</td>
<td>Jun 12</td>
</tr>
<tr>
<td>Quarter begins</td>
<td>Jun 23</td>
<td>Sep 22</td>
<td>Jan 5</td>
<td>Apr 1</td>
<td>Jun 22</td>
</tr>
<tr>
<td>Last day to add most classes</td>
<td>Jun 26</td>
<td>Sep 26</td>
<td>Jan 9</td>
<td>Apr 8</td>
<td>Jun 26</td>
</tr>
<tr>
<td>Last day for 100% refund</td>
<td>Jun 26</td>
<td>Sep 26</td>
<td>Jan 9</td>
<td>Apr 8</td>
<td>Jun 26</td>
</tr>
<tr>
<td>Last day for 40% refund</td>
<td>Jul 10</td>
<td>Oct 10</td>
<td>Jan 23</td>
<td>Apr 21</td>
<td>Jul 10</td>
</tr>
<tr>
<td>Last day to drop classes</td>
<td>Jul 24</td>
<td>Nov 7</td>
<td>Feb 20</td>
<td>May 15</td>
<td>Jul 21</td>
</tr>
<tr>
<td>Quarter ends</td>
<td>Aug 14</td>
<td>Dec 11</td>
<td>Mar 20</td>
<td>Jun 12</td>
<td>Aug 13</td>
</tr>
<tr>
<td>Graduation - Clarkston</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jun 12</td>
</tr>
<tr>
<td>Graduation - Walla Walla</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jun 13</td>
</tr>
<tr>
<td>Faculty - grades due to registrar by 5pm</td>
<td>Aug 19</td>
<td>Dec 16</td>
<td>Mar 24</td>
<td>Jun 16</td>
<td>Aug 18</td>
</tr>
<tr>
<td>Students - grades available online</td>
<td>Aug 21</td>
<td>Dec 18</td>
<td>Mar 26</td>
<td>Jun 18</td>
<td>Aug 20</td>
</tr>
</tbody>
</table>

*New Student Orientation*

Walla Walla Campus (By App’t Only: wwcc.edu/nso) - Jun 13; Jul 10; Aug 5; Sep 9
Clarkston Campus - Friday prior to the start of each quarter (for information, call 509-758-1772)

**COLLEGE CLOSURES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability Day</td>
<td>Jun 27</td>
<td></td>
<td></td>
<td></td>
<td>Jun 26</td>
</tr>
<tr>
<td>Independence &amp; July Sustainability Days</td>
<td>3,4,11,18,25</td>
<td></td>
<td></td>
<td></td>
<td>3,10,17,24,31</td>
</tr>
<tr>
<td>August Sustainability Days</td>
<td>1,8,15,22,29</td>
<td></td>
<td></td>
<td></td>
<td>7,14,21,28</td>
</tr>
<tr>
<td>Labor &amp; September Sustainability Days</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4,7</td>
</tr>
<tr>
<td>Veteran’s Day</td>
<td></td>
<td>Nov 11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thanksgiving &amp; Sustainability Days</td>
<td></td>
<td>Nov 26-28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas &amp; Sustainability Days</td>
<td></td>
<td></td>
<td>Dec 24-26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Year’s Day</td>
<td></td>
<td></td>
<td></td>
<td>Jan 1</td>
<td></td>
</tr>
<tr>
<td>Martin Luther King, Jr. Day</td>
<td></td>
<td></td>
<td></td>
<td>Jan 19</td>
<td></td>
</tr>
<tr>
<td>Presidents’ Day</td>
<td></td>
<td></td>
<td></td>
<td>Feb 16</td>
<td></td>
</tr>
<tr>
<td>Memorial Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May 25</td>
</tr>
</tbody>
</table>
Welcome to Walla Walla Community College. We look forward to having you as a member of our student body this year. WWCC’s recognition as the Top Community College in the Nation by the Aspen Institute of Community College Excellence should give you confidence that we will help you complete your studies and then transfer or get a job related to your career interest.

This catalog contains important information that will help you make important decisions regarding your educational pursuit. We will work with you using it as a tool to discover options and develop your educational plan. You will find answers for many of your questions in this document.

Attending Walla Walla Community College is a smart investment. You will obtain a quality education at a reasonable price. Our commitment is to do everything we can to provide you with relevant learning opportunities, assist you along the way, and then celebrate your success at graduation. Please check out our website for further information. Our faculty and staff look forward to providing face-to-face professional assistance.

Sincerely,

Steven L. VanAusdle
President

---

### Important Phone Numbers

- **Admissions & Records (Class Info/Records/Transcripts)**: 527-4283
- **Toll Free**: 877-471-9292
- **Arts & Sciences**: 527-4212
- **Associated Student Body, Clk**: 758-1718
- **Associated Student Body, WW**: 527-4261
- **Athletics/H.P.E.R. (Dietrich Activity Center)**: 527-4306
- **Bookstore**: 527-4255
- **Business Education (Accounting & Office Technology Programs)**: 527-4304
- **Business Services (Cashier, Payables/Receivables)**: 527-4201
- **Clarkston Center**: 758-3339
  - Toll Free: 877-471-6629
- **Cosmetology Salon**: 527-4247
- **Child Care, Clarkston (Tendercare)**: 758-1779
- **Child Care, Walla Walla (First Flight)**: 527-4544
- **Disabilities Services**: 527-4543
- **Distance Learning**: 527-4331
- **Extended Learning & Community Education**: 527-4331
- **Financial Aid Office**: 527-4301
- **Foundation (Institutional Development - Fund Raising, Scholarships)**: 527-4275
- **Health Sciences, Clk**: 758-1702
- **Health Sciences/Allied Health & Safety Ed**: 527-4589
- **Health Sciences/Nursing WW**: 527-4240
- **Human Resources**: 527-4603
- **High School Programs**: 527-4324
- **Instruction Administration**: 527-4289
- **Library Services**: 527-4277
- **Payroll Office**: 527-4276
- **President’s Office**: 527-4274
- **Registration - Continuing Ed Classes Only**: 527-4443
- **Student Activities**: 527-4307
- **Student Development Center/Advising**: 527-4262
- **Student Development Center/GED Testing**: 527-4267
- **Student Services Administration**: 527-4300
- **Student Support Services (TRiO)**: 527-4258
- **T.D.D. (Hearing Impaired)**: 527-4412
- **Tickets/Box Office, Bookstore**: 527-4255
- **Transitional Studies**: 527-4304
- **Veterans Education Benefits**: 527-1864
- **Walla Walla Campus Info**: 522-2500
  - Toll Free: 877-992-9922
- **Workfirst**: 527-1865
- **Worker Retraining**: 529-1113
- **Workforce Education**: 527-4582
- **WorkSource**: 524-5230
- **WSU Nursing @ WWCC**: 524-5152

---

### Board of Trustees

- **Chair**: Mrs. Darcey Fugman-Small
- **Vice-Chair**: Mr. Don McQuary
- **Chair**: Mrs. Kris Klaveano
- **Chair**: Mr. Miguel Sanchez
- **Chair**: Dr. Roland Schirman

---

Toll Free: 877-992-9922

---

Toll Free: 877-471-6629

---

Welcome to Walla Walla Community College. We look forward to having you as a member of our student body this year. WWCC’s recognition as the Top Community College in the Nation by the Aspen Institute of Community College Excellence should give you confidence that we will help you complete your studies and then transfer or get a job related to your career interest.

This catalog contains important information that will help you make important decisions regarding your educational pursuit. We will work with you using it as a tool to discover options and develop your educational plan. You will find answers for many of your questions in this document.

Attending Walla Walla Community College is a smart investment. You will obtain a quality education at a reasonable price. Our commitment is to do everything we can to provide you with relevant learning opportunities, assist you along the way, and then celebrate your success at graduation. Please check out our website for further information. Our faculty and staff look forward to providing face-to-face professional assistance.

Sincerely,

Steven L. VanAusdle
President

---

### Important Phone Numbers

- **Admissions & Records (Class Info/Records/Transcripts)**: 527-4283
- **Toll Free**: 877-471-9292
- **Arts & Sciences**: 527-4212
- **Associated Student Body, Clk**: 758-1718
- **Associated Student Body, WW**: 527-4261
- **Athletics/H.P.E.R. (Dietrich Activity Center)**: 527-4306
- **Bookstore**: 527-4255
- **Business Education (Accounting & Office Technology Programs)**: 527-4304
- **Business Services (Cashier, Payables/Receivables)**: 527-4201
- **Clarkston Center**: 758-3339
  - Toll Free: 877-471-6629
- **Cosmetology Salon**: 527-4247
- **Child Care, Clarkston (Tendercare)**: 758-1779
- **Child Care, Walla Walla (First Flight)**: 527-4544
- **Disabilities Services**: 527-4543
- **Distance Learning**: 527-4331
- **Extended Learning & Community Education**: 527-4331
- **Financial Aid Office**: 527-4301
- **Foundation (Institutional Development - Fund Raising, Scholarships)**: 527-4275
- **Health Sciences, Clk**: 758-1702
- **Health Sciences/Allied Health & Safety Ed**: 527-4589
- **Health Sciences/Nursing WW**: 527-4240
- **Human Resources**: 527-4603
- **High School Programs**: 527-4324
- **Instruction Administration**: 527-4289
- **Library Services**: 527-4277
- **Payroll Office**: 527-4276
- **President’s Office**: 527-4274
- **Registration - Continuing Ed Classes Only**: 527-4443
- **Student Activities**: 527-4307
- **Student Development Center/Advising**: 527-4262
- **Student Development Center/GED Testing**: 527-4267
- **Student Services Administration**: 527-4300
- **Student Support Services (TRiO)**: 527-4258
- **T.D.D. (Hearing Impaired)**: 527-4412
- **Tickets/Box Office, Bookstore**: 527-4255
- **Transitional Studies**: 527-4304
- **Veterans Education Benefits**: 527-1864
- **Walla Walla Campus Info**: 522-2500
  - Toll Free: 877-992-9922
- **Workfirst**: 527-1865
- **Worker Retraining**: 529-1113
- **Workforce Education**: 527-4582
- **WorkSource**: 524-5230
- **WSU Nursing @ WWCC**: 524-5152

---

### Board of Trustees

- **Chair**: Mrs. Darcey Fugman-Small
- **Vice-Chair**: Mr. Don McQuary
- **Chair**: Mrs. Kris Klaveano
- **Chair**: Mr. Miguel Sanchez
- **Chair**: Dr. Roland Schirman

---

Toll Free: 877-992-9922

---

Toll Free: 877-471-6629
TABLE OF CONTENTS

Academic Calendar ........................................ 2
Presidents Message, Board Members, and Phone Numbers .... 3

About WWCC
About This Catalog ....................................... 7
Accreditation ............................................. 7
Commitment To Diversity ................................. 7
Accommodations For Students With Disabilities ............... 7
Equal Opportunity Statement ................................ 7
Student Right To Know and Safety Act ......................... 7
The College ............................................. 8
WWCC Vision Statement ................................... 8
WWCC Mission Statement .................................. 8
WWCC Core Themes ........................................ 8
Institutional Values ......................................... 8

Admissions and Registration
New Student Checklist ..................................... 11
Step 1 Admissions ......................................... 11
Step 2 Financial Assistance ................................. 13
Financial Aid Programs ..................................... 13
Satisfactory Academic Progress Requirements For
Financial Aid Recipients ................................... 14
Step 3 Placement Testing/Assessment ......................... 14
Step 4 New Student Orientation ............................ 14
Step 5 Educational Advising &
Career Exploration ....................................... 14
Step 6 Registration ......................................... 15
Step 7 Registration ......................................... 15

Academic Information
College Academic Year .................................... 19
Credit Hours ............................................... 19
Transferring Credit To WWCC ............................. 19
Prior Learning Assessment ................................ 19
Maximum Credit by Prior Learning Assessment ............... 19
Course Challenge ......................................... 19
Standardized Testing ....................................... 19
College Costs .............................................. 22
Student Budget 2014-2015 School Year ...................... 22
Refund Policy ............................................. 22
Grading Policy ............................................ 23
Student Academic Responsibilities ......................... 25
Academic Standards Policy ................................ 25
Academic Progress ........................................ 26
Graduation Requirements ................................... 26
Student Records (FERPA) .................................. 27

Student Programs and Services
Associated Student Body (ASB)/Student Government ....... 31
Basic Food Employment & Training ........................ 31
Career Services ........................................... 31
Child Care .................................................. 31
Clubs & Organizations ..................................... 31
College Store - Warrior’s Locker ............................ 31
Counseling .................................................. 31
Disability Support Services ................................ 31
Employment ............................................... 31
Food Service .............................................. 32
GED* Test Administration .................................. 32
Health Insurance .......................................... 32
Honors Program ........................................... 32
Housing ..................................................... 32
Intercollegiate Athletics .................................... 32
Library ....................................................... 32
Opportunity Grant .......................................... 32
Placement Testing .......................................... 33
Publications ................................................. 33
Student Activities ......................................... 33
Student Development Center ............................... 33
Student Handbook ......................................... 33
Testing Center ............................................ 33
Transfer Center ............................................ 33
Transportation ............................................. 33
TRIO/Student Support Services ............................ 34
Tutoring and Learning Center ............................... 34
Veterans’ Affairs .......................................... 34
Workfirst .................................................... 34
Worker Retraining ......................................... 34

Additional Educational Opportunities
WSU Nursing @ WWCC .................................... 37
Clarkston Campus ........................................... 37
Transitional Studies ........................................ 38
eLearning .................................................... 39
High School Completion & Dual Enrollment Options ....... 39

Community Connections
Agriculture Center of Excellence ............................ 43
Business and Professional Development ..................... 43
Lifelong Learning Via Quest:
Adventures In Learning For 50+ ............................ 43
Community Education ...................................... 43
The Avista Center For Entrepreneurship Program
- Clarkston Campus ....................................... 43
Foundation ............................................... 43
The Center for Enology and Viticulture ..................... 43
William A. Grant Water & Environmental Center (WEC) .... 43

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Transfer Policy and Information</td>
<td>48</td>
</tr>
<tr>
<td>Transfer Rights and Responsibilities</td>
<td>48</td>
</tr>
<tr>
<td>Transfer Agreements</td>
<td>49</td>
</tr>
<tr>
<td>Major Related Program Agreements (MRP)</td>
<td>49</td>
</tr>
<tr>
<td>Associate In Arts Degree Requirements</td>
<td>49</td>
</tr>
<tr>
<td>Course Designators For Degree Requirements</td>
<td>50</td>
</tr>
<tr>
<td>Associate In Science Transfer Degree</td>
<td>50</td>
</tr>
<tr>
<td>Associate In Applied Arts and Sciences Degree</td>
<td>51</td>
</tr>
<tr>
<td>Certificates And Endorsements</td>
<td>52</td>
</tr>
<tr>
<td>Workforce Program Information</td>
<td>52</td>
</tr>
<tr>
<td>AA-Direct Transfer Agreement Associate In Arts Degree</td>
<td>53</td>
</tr>
<tr>
<td>Associate In Science Degree - Option I</td>
<td>55</td>
</tr>
<tr>
<td>Associate In Science Degree - Option II</td>
<td>57</td>
</tr>
<tr>
<td>Associate In Biology DTA/MRP</td>
<td>59</td>
</tr>
<tr>
<td>Associate In Business DTA/MRP</td>
<td>61</td>
</tr>
<tr>
<td>Associate In Math Education DTA/MRP</td>
<td>63</td>
</tr>
<tr>
<td>Master List of Transfer Courses</td>
<td>65</td>
</tr>
</tbody>
</table>

### Areas of Study

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Technology</td>
<td>71</td>
</tr>
<tr>
<td>Adult Basic Education</td>
<td>73</td>
</tr>
<tr>
<td>Adult Basic Education / GED®</td>
<td>73</td>
</tr>
<tr>
<td>Agriculture - Agri-Business</td>
<td>74</td>
</tr>
<tr>
<td>Agriculture - Animal Science</td>
<td>78</td>
</tr>
<tr>
<td>Agriculture - Plant And Soils Science</td>
<td>80</td>
</tr>
<tr>
<td>Alcohol and Chemical Dependency</td>
<td>83</td>
</tr>
<tr>
<td>Allied Health and Safety Education</td>
<td>83</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>85</td>
</tr>
<tr>
<td>Anthropology</td>
<td>85</td>
</tr>
<tr>
<td>Art</td>
<td>86</td>
</tr>
<tr>
<td>Astronomy</td>
<td>86</td>
</tr>
<tr>
<td>Automotive Repair Technology</td>
<td>87</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>89</td>
</tr>
<tr>
<td>Business Administration</td>
<td>90</td>
</tr>
<tr>
<td>Cardio-Pulmonary Resuscitation (CPR)</td>
<td>92</td>
</tr>
<tr>
<td>Chemistry</td>
<td>92</td>
</tr>
<tr>
<td>College Experience</td>
<td>93</td>
</tr>
<tr>
<td>Collision Repair Technology</td>
<td>93</td>
</tr>
<tr>
<td>Commercial Truck Driving</td>
<td>95</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>96</td>
</tr>
<tr>
<td>Computer Science</td>
<td>97</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>101</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>103</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>103</td>
</tr>
<tr>
<td>Criminal Justice/Culinary Arts</td>
<td>103</td>
</tr>
<tr>
<td>Dance</td>
<td>105</td>
</tr>
<tr>
<td>Diesel Technology</td>
<td>106</td>
</tr>
<tr>
<td>Drama</td>
<td>107</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>108</td>
</tr>
<tr>
<td>Early Childhood Parenting Education</td>
<td>112</td>
</tr>
<tr>
<td>Economics</td>
<td>112</td>
</tr>
<tr>
<td>Education</td>
<td>112</td>
</tr>
<tr>
<td>Energy Systems Technology - Electrical</td>
<td>113</td>
</tr>
<tr>
<td>Energy Systems Technology - HVACR</td>
<td>115</td>
</tr>
<tr>
<td>Energy Systems Technology - Wind Energy</td>
<td>118</td>
</tr>
<tr>
<td>Engineering</td>
<td>120</td>
</tr>
<tr>
<td>English</td>
<td>123</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>124</td>
</tr>
<tr>
<td>Enology and Viticulture</td>
<td>124</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>127</td>
</tr>
<tr>
<td>Farrier Science</td>
<td>127</td>
</tr>
<tr>
<td>Fire Science</td>
<td>129</td>
</tr>
<tr>
<td>French</td>
<td>131</td>
</tr>
<tr>
<td>Geography</td>
<td>131</td>
</tr>
<tr>
<td>Geology</td>
<td>131</td>
</tr>
<tr>
<td>Health Science Education</td>
<td>132</td>
</tr>
<tr>
<td>High School Completion</td>
<td>133</td>
</tr>
<tr>
<td>History</td>
<td>133</td>
</tr>
<tr>
<td>Humanities</td>
<td>133</td>
</tr>
<tr>
<td>Industrial First Aid</td>
<td>134</td>
</tr>
<tr>
<td>John Deere Technology</td>
<td>134</td>
</tr>
<tr>
<td>Mathematics</td>
<td>136</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>137</td>
</tr>
<tr>
<td>Music</td>
<td>138</td>
</tr>
<tr>
<td>Nursing</td>
<td>139</td>
</tr>
<tr>
<td>Occupational Support</td>
<td>142</td>
</tr>
<tr>
<td>Oceanography</td>
<td>143</td>
</tr>
<tr>
<td>Office Technology</td>
<td>143</td>
</tr>
<tr>
<td>Outdoor Power Equipment</td>
<td>148</td>
</tr>
<tr>
<td>Philosophy</td>
<td>150</td>
</tr>
<tr>
<td>Physical Education and Recreation</td>
<td>150</td>
</tr>
<tr>
<td>Physics</td>
<td>150</td>
</tr>
<tr>
<td>Plant Operations</td>
<td>151</td>
</tr>
<tr>
<td>Political Science</td>
<td>153</td>
</tr>
<tr>
<td>Professional Golf Management</td>
<td>153</td>
</tr>
<tr>
<td>Psychology</td>
<td>155</td>
</tr>
<tr>
<td>Quest Program</td>
<td>155</td>
</tr>
<tr>
<td>Reading</td>
<td>156</td>
</tr>
<tr>
<td>Science</td>
<td>156</td>
</tr>
<tr>
<td>Sociology</td>
<td>156</td>
</tr>
<tr>
<td>Spanish</td>
<td>156</td>
</tr>
<tr>
<td>Turf Management</td>
<td>157</td>
</tr>
<tr>
<td>Water Technologies and Management - Irrigation Technology</td>
<td>159</td>
</tr>
<tr>
<td>Water Technologies and Management - Water Resources Technology</td>
<td>161</td>
</tr>
<tr>
<td>Water Technologies and Management - Watershed Ecology</td>
<td>164</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>165</td>
</tr>
<tr>
<td>Women’s Studies</td>
<td>167</td>
</tr>
<tr>
<td>Writing</td>
<td>167</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Technology</td>
<td>170</td>
</tr>
<tr>
<td>Adult Basic Education</td>
<td>170</td>
</tr>
<tr>
<td>Agri-Business</td>
<td>171</td>
</tr>
<tr>
<td>Agriculture Science and Technology</td>
<td>172</td>
</tr>
<tr>
<td>Alcohol and Chemical Dependency</td>
<td>173</td>
</tr>
<tr>
<td>Anthropology</td>
<td>173</td>
</tr>
<tr>
<td>Art</td>
<td>174</td>
</tr>
<tr>
<td>Astronomy</td>
<td>175</td>
</tr>
<tr>
<td>Auto Repair Technology</td>
<td>176</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>177</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>178</td>
</tr>
<tr>
<td>Business Administration</td>
<td>179</td>
</tr>
<tr>
<td>Cardio-Pulmonary Resuscitation</td>
<td>180</td>
</tr>
<tr>
<td>Chemistry</td>
<td>181</td>
</tr>
<tr>
<td>College Experience</td>
<td>181</td>
</tr>
<tr>
<td>Collision Repair Technology</td>
<td>182</td>
</tr>
<tr>
<td>Commercial Truck Driving</td>
<td>183</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>183</td>
</tr>
<tr>
<td>Computer Science</td>
<td>183</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>186</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>187</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>187</td>
</tr>
<tr>
<td>Dance</td>
<td>188</td>
</tr>
<tr>
<td>Diesel Technology</td>
<td>189</td>
</tr>
<tr>
<td>Drama</td>
<td>190</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>191</td>
</tr>
<tr>
<td>Early Childhood Parent Education</td>
<td>192</td>
</tr>
<tr>
<td>Economics</td>
<td>193</td>
</tr>
<tr>
<td>Education</td>
<td>193</td>
</tr>
<tr>
<td>Energy Systems Technology</td>
<td>194</td>
</tr>
<tr>
<td>Engineering</td>
<td>197</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>198</td>
</tr>
<tr>
<td>English</td>
<td>198</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>199</td>
</tr>
<tr>
<td>Enology and Viticulture</td>
<td>201</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>202</td>
</tr>
<tr>
<td>Ethnic Studies</td>
<td>202</td>
</tr>
<tr>
<td>Farrier Science</td>
<td>202</td>
</tr>
<tr>
<td>Fire Science</td>
<td>203</td>
</tr>
<tr>
<td>French</td>
<td>203</td>
</tr>
<tr>
<td>GED® Preparation</td>
<td>204</td>
</tr>
<tr>
<td>Geography</td>
<td>204</td>
</tr>
<tr>
<td>Geology</td>
<td>204</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>205</td>
</tr>
<tr>
<td>High School Completion</td>
<td>207</td>
</tr>
<tr>
<td>History</td>
<td>208</td>
</tr>
<tr>
<td>Humanities</td>
<td>209</td>
</tr>
<tr>
<td>Industrial First Aid</td>
<td>210</td>
</tr>
<tr>
<td>John Deere Technology</td>
<td>210</td>
</tr>
<tr>
<td>Mathematics</td>
<td>211</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>212</td>
</tr>
<tr>
<td>Music</td>
<td>213</td>
</tr>
<tr>
<td>Nursing</td>
<td>215</td>
</tr>
<tr>
<td>Nutrition</td>
<td>216</td>
</tr>
<tr>
<td>Occupational Support</td>
<td>216</td>
</tr>
<tr>
<td>Oceanography</td>
<td>217</td>
</tr>
<tr>
<td>Office Technology</td>
<td>217</td>
</tr>
<tr>
<td>Outdoor Power Equipment</td>
<td>219</td>
</tr>
<tr>
<td>Paramedic</td>
<td>219</td>
</tr>
<tr>
<td>Philosophy</td>
<td>220</td>
</tr>
<tr>
<td>Physical Education and Recreation</td>
<td>221</td>
</tr>
<tr>
<td>Physics</td>
<td>223</td>
</tr>
<tr>
<td>Political Science</td>
<td>224</td>
</tr>
<tr>
<td>Professional Golf Management</td>
<td>224</td>
</tr>
<tr>
<td>Psychology</td>
<td>225</td>
</tr>
<tr>
<td>Reading</td>
<td>226</td>
</tr>
<tr>
<td>Science</td>
<td>226</td>
</tr>
<tr>
<td>Sociology</td>
<td>226</td>
</tr>
<tr>
<td>Spanish</td>
<td>227</td>
</tr>
<tr>
<td>Turf Management</td>
<td>228</td>
</tr>
<tr>
<td>Water Technologies and Management</td>
<td>228</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>231</td>
</tr>
<tr>
<td>Women's Studies</td>
<td>232</td>
</tr>
<tr>
<td>Writing</td>
<td>232</td>
</tr>
</tbody>
</table>

# Faculty, Staff and Administrators

**Faculty, Staff and Administrators.**


# Campus Maps

**Campus Maps.**

Clarkston Map Legend .......................... 247
Clarkston Campus Maps ......................... 246
Campus Maps ................................... 245
ABOUT WALLA WALLA COMMUNITY COLLEGE

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.

Anyone may review the documents that describe the College’s accreditation. These documents are found in the office of the Vice President of Instruction and on the College’s website at www.wwcc.edu.

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
WWCC complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) of 1990 as amended in 2008. Information regarding student accommodations may be obtained by contacting Claudia Angus, Coordinator of Disability Support Services, Walla Walla Community College, 500 Tausick Way, Walla Walla, WA 99362. Walla Walla campus: 509.527.4262, TDD 509.527.4412, claudia.angus@wwcc.edu; or Carol Bennett, Clarkston campus: 509.758.1718, TDD 509.758.1714, carol.bennett@wwcc.edu.

Equal Opportunity Statement
Walla Walla Community College District No. 20 (WWCC) is committed to provide equal opportunity and nondiscrimination for all educational and employment applicants as well as for its students and employed staff, without regard to race, color, creed, national origin, sex, sexual orientation, including gender expression/identity, genetic information, marital status, age (over 40), the presence of any sensory, mental, or physical disability, the use of trained guide dog or service animal by a person with a disability, or status as a Vietnam and/or disabled veteran, National Guard member or reservist in accordance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, the Federal Rehabilitation of 1973, the Americans with Disabilities Act of 1990 and any other applicable Federal and Washington State laws against discrimination. Overall Affirmative Action/Equal Opportunity program responsibility is assigned to Sherry Hartford, Human Resources Director (509)527-4382. The College’s Title IX and Section 504 Officer is Wendy Samitore, (509)527-4300. Disabilities Support Services Coordinators are: Walla Walla Campus, Claudia Angus (509)527-4262; Clarkston Campus, Carol Bennett (509)758-1718; 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, Walla Walla Community College, 500 Tausick Way, Walla Walla, WA 99362.

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

Walla Walla Community College has rapidly grown from 850 students in 1967 to a present annual enrollment of over 12,000. Located on approximately 100 acres, the Walla Walla campus has justifiably become an educational and cultural center for Southeastern Washington.

Extending facilities and programs throughout its four-county district, Walla Walla Community College’s Clarkston campus, located in Clarkston, Washington, is the hub of educational activity in Asotin and Garfield counties. Over 1300 full- and part-time students are enrolled annually. Persons interested in knowing more about the Clarkston campus should visit at: 1470 Bridge Street, Clarkston, Washington, or call 509.758.3339 (toll-free 1.877.471.6629). Mailing address: Clarkston Center, P.O. Box 700, Clarkston, WA 99403.

Walla Walla Community College also provides educational programs and services to offenders of the Washington State Penitentiary and Coyote Ridge Corrections Center. Qualified offenders are eligible to apply for admission to developmental courses, as well as workforce programs and an AA degree. The College also provides student services in the areas of admissions, advisement and registration, counseling, testing, GED® testing, and placement.

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, Strengthen 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
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 &amp; Records. Once your application has been processed, you will receive an acceptance email and letter that includes your Student ID number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2... Financial Assistance</td>
<td>For priority funding: Complete your FAFSA by March 1 of each year. Provide supporting documents &amp; WWCC information form by May 1. Scholarships, Grants, Loans &amp; 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.</td>
</tr>
<tr>
<td>Step 3... Placement Testing/Assessment</td>
<td>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.</td>
</tr>
<tr>
<td>Step 4... New Student Orientation</td>
<td>For Fall Priority Registration, students must complete a New Student Orientation. Dates &amp; sign up for orientation may be found online at <a href="http://www.wwcc.edu/nso">www.wwcc.edu/nso</a> beginning May 1. For subsequent quarters, New Student Information Sessions are also offered.</td>
</tr>
<tr>
<td>Step 5... Educational Advising &amp; Career Exploration</td>
<td>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.</td>
</tr>
<tr>
<td>Step 6... Registration</td>
<td>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.</td>
</tr>
<tr>
<td>Step 7... Payment</td>
<td>Tuition &amp; Fees are usually due 10 days prior to the first day of the quarter. An automatic Payment Plan is available online at <a href="http://www.wwcc.edu/pay">www.wwcc.edu/pay</a>.</td>
</tr>
</tbody>
</table>

Step 1 Admissions

Walla Walla Community College is an open-door, higher education institution. All qualified individuals are accepted who are at least 18 years of age or are graduates of an accredited high school or have an equivalent certificate, i.e., General Educational Development (GED®). Applicants under the age of 18 at the time of registration and who are not high school graduates must complete the Under-Age Admission Policy paperwork available online at www.wwcc.edu/underage or be participating in a program designed for high school students.

Some programs have specific admission procedures and limited space; therefore, admission to the College does not guarantee availability of all programs or courses. Please review special admission procedures for workforce programs under entrance requirements for the specific program of interest.

Explanations 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 509.527.4282.

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 Registrar. Verification must be provided.

Official Change of Status/Reclassification as a Non-Resident

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

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

Application for Reclassification

Students wishing to change their residency classification must complete a residency questionnaire found at www.wwcc.edu/residency 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 509.527.4282 or 509.758.3339 in Clarkston.

Non-Resident, U.S. Citizens

Tuition for non-resident U.S. citizens is listed online at www.wwcc.edu/tuition.
<table>
<thead>
<tr>
<th>STUDENT CATEGORY</th>
<th>ENROLLMENT PROCEDURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>New students working on a degree or certificate</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Take Compass placement test. Attend New Student Orientation for priority registration (Walla Walla campus only). Workforce Education programs: Contact the program of interest for specific Entrance Requirements and priority list procedures.</td>
</tr>
<tr>
<td>Students working on a degree or certificate, transferring credits from another college</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Take Compass placement test (if necessary). Submit official transcripts from other colleges and complete a transcript evaluation form found online at <a href="http://www.wwcc.edu/traneval">www.wwcc.edu/traneval</a>. Workforce Education programs: Contact the program of interest for specific Entrance Requirements and priority list procedures. Attend New Student Orientation for priority registration (Walla Walla campus-required registration at <a href="http://www.wwcc.edu/nso">www.wwcc.edu/nso</a> available May 1.)</td>
</tr>
<tr>
<td>Students returning after an interruption in their enrollment at WWCC</td>
<td>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).</td>
</tr>
<tr>
<td>Students in the Running Start Program</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Take Compass placement test for eligibility determination. Contact high school counselor for Quarterly Referral, Enrollment Verification Form, and transcript information. Attend Running Start Student Orientation by calling HS Programs Office, 509.527.4324 (available May 1).</td>
</tr>
<tr>
<td>Students in the Alternative Education Program (AEP)</td>
<td>Enrolled high school students contact Walla Walla School District Office to obtain a referral; out-of-district applicants need an inter-district release from their school district superintendent. Non-enrolled and enrolled high school students contact WWCC High School Programs Office for an AEP application. 1. Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. 2. Take Compass placement test. 3. Interview with the high school programs director. 4. Advise with an AEP advisor, register for classes, and attend a mandatory AEP orientation.</td>
</tr>
<tr>
<td>Students under age 18 not enrolled in Running Start, AEP or other specific age appropriate coursework who do not have a high school diploma or equivalent</td>
<td>Download the Underage forms online at <a href="http://www.wwcc.edu/underage">www.wwcc.edu/underage</a> or pick up at the Office of Admissions and Registration. Submit completed forms and supporting documentation to the High School Programs Office in WW or to the Clarkston Campus. Schedule appointment for student and parent/guardian for an interview and advising with the High School Programs Director, or Carol Bennett in Clarkston.</td>
</tr>
<tr>
<td>Students attending English as a Second Language (ESL), Adult Basic Education (ABE) or GED preparation courses</td>
<td>Contact the Transitional Studies Department at 509.524.4808 or 509.758.3339 in Clarkston for registration information.</td>
</tr>
<tr>
<td>Students planning to take Extended Learning, Quest, Community Education</td>
<td>Extended Learning, Community Education &amp; Quest students, please contact: 509.527.4561 or email <a href="mailto:quest@wwcc.edu">quest@wwcc.edu</a></td>
</tr>
<tr>
<td>Students in High School Completion (HSC) who are 19 yrs of age and older</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Submit official high school transcript(s) from all high schools to the High School Programs Office. Take Compass placement test. Meet with High School Completion advisor for advising and registration.</td>
</tr>
<tr>
<td>International Students with F1 or F2 Visa</td>
<td>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 paper-based score is 500 / minimum computer-based score is 173 / minimum Internet-based score is 61). Students transferring from other U.S. institutions must provide documentation of good academic standing (2.0 GPA or better) AND verification from current U.S. institution that the student is eligible for re-admission, financial affidavit and TOEFL scores.</td>
</tr>
</tbody>
</table>
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 509.758.3339 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 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.

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 WWCC Financial Aid Office website.

Financial Aid Programs

<table>
<thead>
<tr>
<th>GRANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Pell Grant</td>
</tr>
<tr>
<td>Federal Supplemental Educational Opportunity Grant</td>
</tr>
<tr>
<td>Washington State Need Grant</td>
</tr>
<tr>
<td>State Tuition Waiver</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYMENT PROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Work-Study</td>
</tr>
<tr>
<td>State Work-Study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOAN PROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Direct Loan</td>
</tr>
<tr>
<td>Federal Perkins Loan</td>
</tr>
<tr>
<td>Federal PLUS Loan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOLARSHIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWCC Foundation Scholarships</td>
</tr>
<tr>
<td>General Scholarship Information</td>
</tr>
<tr>
<td>Athletic Scholarships</td>
</tr>
<tr>
<td>Activity Scholarships</td>
</tr>
</tbody>
</table>
Other Financial Resources
- Bureau of Indian Affairs – available to qualified Native Americans. Information available at www.bie.edu
- Department of Vocational Rehabilitation - 509.526.2590 or 1.877.501.2233
- Veterans Administration - 509.527.1864 or 509.758.1718 in Clarkston
- WorkFirst – tuition and book assistance for qualified low-income working parents or TANF recipients seeking training to obtain employment. 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 509.527.4208 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 complete less than:</th>
<th>Aid will be suspended if you</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 scheduled Tuesday evenings at 5:15 p.m. and 12:30 - 5pm Monday - Friday.

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. 509.527.4555 or 509.527.4284

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 e-schedule online. After completing the advising process, students will obtain 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 (fourth day in summer).

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. Set up the automatic payment plan with a bank account, MasterCard, American Express, 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
Transferring Credit to WWCC
Walla Walla Community College recognizes academic credits earned at other regionally accredited institutions with grades of D (1.0) or better, provided they are essentially equivalent in academic level and nature to classes offered at WWCC. Walla Walla Community College subscribes to the statewide Policy on Inter-College Transfer and Articulation among Washington Colleges and Universities endorsed by all the public and most private colleges and universities in Washington. For more detailed information, contact the Office of Admissions and Records or see the section of this catalog entitled “Transfer Policy Information.” To have credits evaluated, students should complete a WWCC application for admissions and have their previous college(s) send an official transcript to the WWCC Office of Admissions and Records. Students fill out the Transcript Evaluation Form available online at www.wwcc.edu/traneval, indicating the degree they are seeking; then they submit the online form to the Office of Admissions and Records.

Prior Learning Assessment
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 including foreign 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 may be awarded.

Prior learning can be assessed using a variety of methods, including course challenge; standardized tests; credits earned through the American Council of Education’s Guide to the Evaluation of Educational Experiences in the Armed Services (ACE); the systematic observation of skill demonstrations, including role plays and simulations; and the evaluation of case studies or other assignments. Credit can only be granted for college-level learning which can be demonstrated and documented.

The College supports as guidelines the principles of best practices published by the Washington State Community and Technical Colleges, as well as the policies established by the Northwest Commission on Colleges and Universities. If a student wishes to investigate the possibility to have prior learning recognized by the College, the student should first consult with the Registrar in the Office of Admissions and Records, who will direct them to the appropriate department expert. Please refer to www.wwcc.edu/pla for more information.

Maximum Credit by Prior Learning Assessment
A maximum of 25% of the credits needed for degree or certificate completion may be earned through prior learning assessment. For a 90-credit degree, the maximum credits allowed using PLA is 22.5. Students planning to transfer should check on the number of credits earned through PLA that the receiving institution will accept.

Course Challenge
Course challenge is possible in selected courses if the student has prior educational experience paralleling the skill or knowledge required to complete the course. Students must contact the Registrar in the Office of Admissions and Records for referral to the applicable instructional department, if appropriate. Standard tuition and fees will be charged. Ordinarily, students will not be allowed to challenge more than one course per quarter.

Standardized Testing
The college accepts up to 45 credits earned through standardized testing including Advanced Placement (AP), College Level Examination Program (CLEP), Dantes/Military Credit, and International Baccalaureate (IB). Please see next page for details.
### Advanced Placement (AP)

Approved Advanced Placement scores of 3 or higher will be recognized for credit. Official test results should be sent to the Testing Center within the Student Development Center on the Walla Walla campus. Below is a table outlining the AP exams that Walla Walla Community College will accept.

<table>
<thead>
<tr>
<th>Exam Title</th>
<th>Credit Awarded</th>
<th>Course Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Placement</strong></td>
<td><strong>Credits earned for AP scores of 3, 4, or 5</strong></td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>15 credits</td>
<td>HUM Art</td>
</tr>
<tr>
<td>Biology</td>
<td>15 credits</td>
<td>SCI Biology</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>5 credits</td>
<td>QS Math</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>10 credits</td>
<td>QS Math</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5 credits</td>
<td>SCI Chemistry</td>
</tr>
<tr>
<td>English Lang &amp; Comp</td>
<td>5 credits</td>
<td>COM English</td>
</tr>
<tr>
<td>English Literature &amp; Comp</td>
<td>10 credits</td>
<td>COM English</td>
</tr>
<tr>
<td>Government &amp; Politics: Comparative</td>
<td>5 credits</td>
<td>SS Political Sci</td>
</tr>
<tr>
<td>Government &amp; Politics: US</td>
<td>5 credits</td>
<td>SS Political Sci</td>
</tr>
<tr>
<td>Humanities</td>
<td>15 credits</td>
<td>HUM Humanities</td>
</tr>
<tr>
<td>Physics B</td>
<td>15 credits</td>
<td>SCI Physics</td>
</tr>
<tr>
<td>Psychology</td>
<td>5 credits</td>
<td>SS Psychology</td>
</tr>
<tr>
<td>Statistics</td>
<td>5 credits</td>
<td>QS Math</td>
</tr>
<tr>
<td>History: US</td>
<td>15 credits</td>
<td>SS History</td>
</tr>
<tr>
<td>History: World or Western Civ.</td>
<td>10 credits</td>
<td>SS History</td>
</tr>
<tr>
<td>History: European</td>
<td>10 credits</td>
<td>SS History</td>
</tr>
<tr>
<td>Art 2D Design</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Art 3D Design</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Art Studio: Drawing</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Economics/Macroeconomics</td>
<td>5 credits</td>
<td>SS Economics</td>
</tr>
<tr>
<td>Economics/Microeconomics</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5 credits</td>
<td>SCI General Ecology</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>French Language &amp; Culture</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Italian Language</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>15 credits</td>
<td>HUM Spanish</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>German Language</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Latin: Virgil</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Japanese Language</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Music Theory</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Human Geography</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
<tr>
<td>Physics C: Electricity &amp; Magnetism</td>
<td>5 credits</td>
<td>Elective</td>
</tr>
</tbody>
</table>
College Level Examination Program (CLEP)

CLEP exams are administered through the testing department within the Student Development Center. Complete the registration form in the CLEP bulletin to register for an exam. Variable testing fees are charged by CLEP, depending on the type and number of tests administered. Credits earned through this process will be transcribed as CLEP credits. Please contact the Credentials Evaluator in the Office of Admissions and Records for questions on which CLEP exams WWCC will accept. Students planning to transfer should check on the transferability and credit limit of CLEP credits at the transfer institution.

### CLEP

**Credits granted when scores exceed ACE Credit Recommendation**

<table>
<thead>
<tr>
<th>Exam Title</th>
<th>Credit Awarded</th>
<th>Courses Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>15 credits</td>
<td>Biology 211</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5 credits</td>
<td>Chemistry 110</td>
</tr>
<tr>
<td>Calculus</td>
<td>10 credits</td>
<td>Math 151</td>
</tr>
<tr>
<td>Spanish</td>
<td>15 credits</td>
<td>Spanish 121</td>
</tr>
</tbody>
</table>

Spanish Credits Explained: 50 = 5 Credits • 63 = 10 Credits • 70= 15 Credits

<table>
<thead>
<tr>
<th>Exam Title</th>
<th>Credit Awarded</th>
<th>Courses Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>15 credits</td>
<td>Humanities 116</td>
</tr>
<tr>
<td>Principles of Mgt.</td>
<td>5 credits</td>
<td>Business Admin. 189</td>
</tr>
<tr>
<td>US History</td>
<td>15 credits</td>
<td>History 146</td>
</tr>
<tr>
<td>World History or Western Civilizaton</td>
<td>15 credits</td>
<td>History 116</td>
</tr>
<tr>
<td>Principles of Acct.</td>
<td>15 credits</td>
<td>Accounting 201</td>
</tr>
<tr>
<td>Human Growth &amp; Dev.</td>
<td>5 credits</td>
<td>Lifespan Psy 200</td>
</tr>
</tbody>
</table>

Other exams that are offered, but no credits are available at WWCC.

- American Literature
- Analyzing and Inter. Lit
- Freshman Composition
- English Literature
- French College 1 & 2
- American Government
- Intro to Ed. Psychology
- History of US I
- History of US II
- Macroeconomics
- Microeconomics
- Intro to Psychology

- Social Science & History
- Intro. Sociology
- Western Civ. I
- Western Civ II
- College Algebra
- Trigonometry Algebra
- General Biology
- Natural Science
- Trigonometry
- Intro to Business Law
- Information Systems & Computer Applications
- Principles of Marketing
### Dantes/Military Credit

Dantes scores on the 50th percentile or higher will be recognized for credit when they can be applied to a stated educational objective.

### International Baccalaureate (IB)

The International Baccalaureate (IB) program consists of college-level courses and exams for high school students. The College awards credits for higher level IB examinations that meet subject and score criteria agreed upon by the college departments that oversee each appropriate discipline. Please contact the Office of Admissions and Records for more information.

### College Costs

During the 2014-2015 academic year, full-time tuition and mandatory fees are estimated to cost $4,357 for one year (15 credits per quarter for three quarters) for Washington State residents and $5,657 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 2014-2015 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>$4,375</td>
<td>$4,375</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>$1,670</td>
<td>$2,040</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$11,415.00</strong></td>
<td><strong>$17,975.00</strong></td>
</tr>
</tbody>
</table>

*Add $1,300 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></td>
<td>Up to 40% refund from 6th day of the quarter through the first 20 calendar days.</td>
</tr>
<tr>
<td>Summer</td>
<td>Up to 100% refund on or before 4th day of the quarter.</td>
</tr>
<tr>
<td></td>
<td>Up to 40% refund from 5th day of the quarter through the first 20 calendar days.</td>
</tr>
</tbody>
</table>

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

**Refunds are handled differently for special sessions and short courses.

### Reduction of Credit Hours

Tuition and fees may be partially refunded if students officially reduce their credit-hour load through the 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
I Incomplete – The grade of “I” may be assigned only upon the request of the student and with the concurrence of the instructor. It is given to the student who is doing passing work and has completed at least two-thirds of the course when a circumstance arises that prevents normal completion. Neither lateness in completing work nor the desire to do extra work to raise a poor grade is considered an extenuating circumstance. A student must obtain an incomplete grade Contract from the Office of Admissions and Records 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.

Starting in academic year 2014-15, 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.

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

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

W Withdrawal – Students finding it necessary to withdraw from a class or the College must complete an official withdrawal form and submit it to the Office of Admissions and Records. Withdrawals can be processed at the Office of Admissions and Records throughout any drop period. Students should refer to the class schedule 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 veteran's 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 quarterly class schedules; Washington Online (WAOL) dates may differ.

Y In progress – (not a final grade). Used in courses that allow enrollment on a continuous basis during the quarter. Students who enter such courses after the quarter has begun and need additional time not to exceed two subsequent and consecutive quarters may be given time to complete course requirements.

Z No credit – student has not met minimal objectives due to documented extenuating circumstances (accident, illness, death in family, etc.). The faculty member initiates this grade. This grade is not computed in the GPA and cannot be changed unless instructor error has occurred.

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

Grade Exclusion Policy
A returning student 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 without the student’s having been 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.

To initiate a petition for exclusion of grades, the student should complete the online Grade Exclusion/Redline Request form. After review, OAR will forward the request to the Vice President of Instruction for approval.

• 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.

If the student's petition is approved, the grades to be excluded 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.

• 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.

Adding or Dropping A Course

A student may add a course only during the first five days of classes (four days for summer) unless the course has continuous enrollment.

A student may drop a course based on the dates in the quarterly schedule. It is the student's responsibility to initiate a drop online if within the first five days of classes (four days for summer), or complete the proper form at 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.

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.

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

Honors Recognition

Each quarter, except summer, the College recognizes student academic achievement for full-time students (15 credits or more within a program area 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 twelve 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.

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 other, 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, multimedia 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 receive warning;
   b. student receive a lowered grade;
   c. student receive failing grade for the course;
   d. student dropped from course;
   e. student be 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.

**Academic Progress**

**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 WWC’s "Academic Standards Policy" located in this catalog. Persons who are placed on Academic Probation can be re-instated to regular status by earning a 2.0 GPA for the probationary quarter.

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

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

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

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

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

**Veterans Records of Progress**

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

- Records of withdrawals are filed and checked with the official schedule certified by the College for funding. Appropriate forms are submitted if funding levels are reduced or increased due to the schedule change.
- Records of re-enrollment for courses leading to degrees are checked against permanent records when a program change application is submitted. This ensures that all eligible persons pursue courses and programs for which they are certified.
- A cumulative transcript of progress is on file in each veteran's 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 Requirements**

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 it is determined 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 the summer quarter immediately following. 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 following information may be released without notification to the student on a need-to-know basis, as it is representative of public directory information: student’s name, field of study, athletic information, date of completion, degree, and awards earned. 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 quarterly, a Non-disclosure Request to the Office of Admissions and Records.

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

509.527.4307 Walla Walla • 509.758.1718 Clarkston  
www.wwcc.edu/asb

Elections 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 five elected officers: ASB President, Executive Vice President, Business Vice President, Activities Vice President, and Media and Technologies Vice President. 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

Tests 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. Most tests are free to WWCC students.

**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 • 509.758.1718 - 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  
www.collegestore.wwcc.edu

In Walla Walla, the Warrior’s Locker is open Monday-Friday from 7:30 a.m. to 4:30 p.m. Walla Walla campus offers extended hours the first two days of each term: Fall, Winter, and Spring from 7:00 a.m. to 6:00 p.m. In Clarkston, the Warrior’s Locker is open Monday-Friday from 8:00 a.m. to 4:30 p.m. Summer hours may vary on both campuses.

Other services include:

- Warrior Espresso Bar (Walla Walla)
- Apparel, gifts and greeting cards
- Textbooks, supplies, snack items
- Campus Ticket Office (Walla Walla)
- Educational Discount Software on limited titles
- U.S. Postal Substation with limited services (Walla Walla)
- ASB discount event ticket outlet

**Counseling**

509.527.4262 - Walla Walla • 509.758.1718 - Clarkston

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 TDD  
509.758.1718 - Clarkston  
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; Carol Bennett, Clarkston Campus). The Coordinator will issue reasonable accommodations according to the course requirements and the functional limitations of the disability. Accommodations are modifications to the instructional setting such as a quiet location for testing, sign language interpreters, or adjustable tables.

**Employment**

**Student Help/Work Study Positions**

509.524.5230 - Walla Walla • 509.758.3339 - Clarkston  
www.wwcc.edu/studentjobs

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

**WorkSource**

509.524.5230 - Walla Walla • 509.758.1716 - Clarkston  
www.go2worksource.com

Services include:

- Placement and referral
- Job listings
- Job development and 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. 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 p.m. Monday through Thursday and 8:00 a.m. to 12:30 p.m. on Friday.

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

Walla Walla Community College and the WWCC Clarkston Campus are official GED® (General Educational Development) testing centers. The GED® testing service is available to persons 19 years and older or to persons 16 to 18 years who are released by their local high schools. 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 can get reduced rates on accident and medical insurance coverage. Brochures are available from the cashier or information can be obtained online by visiting www.summitamerica-ins.com/wssc.

**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 Association of Community Colleges (NWAACC) 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.

**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 7:30am-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

Degree seeking students are required to take a placement test prior to registering for classes. The purpose of this test is to assist your advisor in placing you in the right courses for your abilities. The current Walla Walla testing schedule is available on the website or in the Student Development Center.

Placement testing at the Clarkston Campus, Room 117A, is scheduled Tuesday evenings at 5:15 p.m. and 12:30 - 5:00 p.m., Monday - Friday.

**Publications**
509.527.4307 - Walla Walla • 509.758.1718 - 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@www.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 • 509.758.1718 - 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. Popular student activities include Almost-Free Bowling, Karaoke, Monday Night Football, Ice Skating, the Cowboy Breakfast and many more.

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

The Student Development Center houses career, counseling, and advising services, disability services, veterans’ services, testing and transfer services. Counselors and advisors in the Student Development Center help students identify and successfully achieve their academic, career and personal goals. Staff members also assist students with the development of problem-solving skills and advocate for students when appropriate.

**Student Handbook**
[www.wwcc.edu/studenthandbook](http://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 • 509.758.1772 - Clarkston
www.wwcc.edu/testing

The Testing Center in Walla Walla is located in Room 236 on the second floor, and provides testing services for distance learning students, make up exams, and other specialty exams. The Testing Center is open for drop-in testing 36 hours per week between Monday and Friday. Please call the number listed above or check the website for Testing Center hours.

The Testing Center at the Clarkston 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 Clarkston Campus. College catalogs, websites, equivalency guides, and other college information is 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.

**Transportation**
509.525.9140 - Walla Walla • 509.527.3779 - Dial-A-Ride/Walla Walla • 208.298-1340 - Clarkston
www.wwcc.edu/transportation

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

Some of the services provided by SSS/TRiO are:

- Personal, career, and academic advising
- Free one-to-one math and science tutorial services
- Scholarship and Financial Aid planning/monitoring
- Transfer planning to four-year colleges including campus visits
- Financial Literacy Education

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

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.

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 Veteran’s 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.
Additional Educational Opportunities
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.

GED® Preparation

This program is designed to help students pass the five GED® tests in writing skills, social studies, science, interpreting literature and the arts, and mathematics. Spanish GED® tests are also available. The student must be 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.

Nursing

509.758.1702 – Clarkston

The Associate Degree Nursing program is accredited by the Accrediting Commission for Education in Nursing (ACEN).

- 2-year RN (Registered Nurse) with optional Practical Nurse exit.
- RN to BSN Articulation Agreements are in place for students to transfer to Washington State University, Lewis-Clark State College, and Western Governors University to complete a Bachelor of Science in Nursing (BSN) degree.
- Students may choose to exit at the PN level. This option is not accredited by ACEN.

Counseling and Advising

509.758.1718 - Clarkston

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. Interested individuals may also call WorkSource at 758-1716 for more information about programs and services available on the Clarkston Campus.

Childcare On-Campus

509.758.1779 – Clarkston

The childcare center is open weekdays for children infant one to six years old. Hours within the operating day are flexible to accommodate varying schedules.

Student Support Services/TRiO

509.758.4258 – Clarkston  509.527.4638 – Walla Walla

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
Additional Educational Opportunities

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/CMS/fileadmin/PDF/TRIO/TRiO_application.pdf

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: 509.758.1702.

Transitional Studies
509.527.4646 or 509.524.4808 – Walla Walla
509.758.1261 - Clarkston

The mission of the Walla Walla Community College Transitional Studies Department is to provide the highest quality of educational instruction to students studying the basic skills needed to reach their educational and occupational goals. The Department of Transitional Studies offers a variety of courses and services to help students upgrade skills in reading, writing, communication, and mathematics. High school classes that meet Washington State graduation requirements are offered. Students may also prepare for the General Education Development (GED®) examination. Instruction in the English language for non-English speakers is available daily.

Classes are held on the main campus and at various sites throughout the College's service area. For more information, call the Transitional Studies Department 509.527.4646 or 524-4808 in Walla Walla and 509.758.1261 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 courses serve students age 18 or older who have not completed high school. Students between the ages 16 and 18 must complete the Underage application process (available online) to be eligible to receive services in ABE. These courses are designed to upgrade basic skills in reading, writing, math, science, and social studies to the eighth grade level. Students are placed using CASAS assessment at entry and placed at consistent with Washington State Learning standards. Check the tuition and fee schedule available online.

ABE - Adult Basic Education
Instruction is provided in fundamental academic and pre-occupational skills for adults with an emphasis on reading, math, and writing skills. This program is for adults 18 years of age or older who do not have a high school diploma or who wish to upgrade basic skills. Students 16-17 years of age must have parent or guardian permission to enroll. A parent or guardian must verify that the student is no longer attending or is not enrolled in public school.

High School Equivalency and GED®

Students who are 16 years of age or older and who do not have a high school diploma, may also prepare to take Adult High School equivalency or GED®. Students may participate in general classroom instruction, small group work, computerized instruction, individualized instruction with an instructor and/or self-paced independent work. GED® students prepare to take four subject area tests: Reasoning through Language Arts, Mathematical Reasoning, Science, and Social Studies. The GED® testing is offered on computers. There is no print version of the test. A certificate is given by the State upon successful completion of the exam.

English as a Second Language

Courses in English as a Second Language are offered to speakers of other languages. Instruction is designed to help students acquire skills in understanding, speaking, reading, and writing needed to fully engage in all aspects of life including in the workforce. Students are assessed using CASAS at entry and placed at one of the five levels consistent with Washington State Learning standards. On-going pre and post CASAS assessment is required. Class fees are $25 per quarter.
**Integrated Basic Education Skills Training**  
509.527.4328 – Walla Walla

I-BEST is a nationally recognized teaching model that allows students to increase literacy and work skills so that they can earn credentials, get living wage jobs, and put their talents to work for employers. I-BEST pairs two instructors in the classroom, one to teach professional and technical content and the other to teach reading, writing, math or English Language. 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.

**eLearning**

eLearning courses offer students a flexible alternative to on-campus classes. Students participate in the course on their own schedule and at a location most convenient for them. eLearning students can be anyone from those seeking to earn their AA Degree entirely online to those in the workplace looking to take one or two classes for career development. For more information on eLearning courses contact 509.527.4331.

**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  •  509.758.1718 - 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

**Running Start**  
509.527.4324 - Walla Walla  •  509.758.1718 - 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, tuition-free, 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 taking the COMPASS placement test and meeting with their high school counselor, in addition to a WWCC advisor. Running Start students pay quarterly tuition and fees 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 some textbook assistance by providing documentation (example: free or reduced lunch) to their Running Start advisor by the first day of the quarter.

**Dual Credit - Professional Technical**  
509.527.1876 - Walla Walla  •  509-758-1711 - Clarkston

Dual Credit 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.

---

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.

**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.

**Lifelong Learning via QUEST: Adventures in Learning for 50+**

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+.

**Community Education**

Community Education 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 the way you like them, relaxed and fun - no tests, no grades, and no credits. Here you will find Community Kitchens, wine knowledge, health/fitness classes, social media, customer service training and continuing education. Have a talent you would like to share?

**The AVISTA Center for Entrepreneurship Program - Clarkston Campus**

A WWCC partnership with Avista Corporation. The Avista Entrepreneurship Center on the Clarkston Campus provides short term training that prepares students to engage in a self-owned private enterprise. The integrated training is intended to initiate small business development through providing necessary skills required for sustaining a privately owned business. Students receive instruction in many areas including Finance, Business Development, Entrepreneurial Skills, Marketing, and Networking. Students receive a certificate upon successful completion of the program and have the option of pursuing a Business degree from the college. Contact: Jennifer DeJean, 509.758.1715, jennifer.dejean@wwcc.edu, http://www.wwcc.edu

**Foundation**

Since 1982, the Walla Walla Community College Foundation has supported the programs, facilities and targeted needs of students and faculty. The Foundation has nurtured relationships with individuals and businesses in creating numerous scholarship and support funds for students; and has served as an important conduit for facility and equipment needs. The Foundation also works with various organizations in securing grant and gift funds for the college.

**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, Marketing and Management.

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 many 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.

**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 provide a place where people with diverse interests and values can learn, share knowledge and work together to create a healthy and sustainable natural environment. The WEC serves and supports stakeholders to resolve complex water and environmental issues and concerns, while also serving as a place of learning and stewardship.
COMMUNITY CONNECTIONS

The WEC coordinates the WWCC Watershed Ecology, Water Resources Technology, and Irrigation Technology degree programs, and “Go Green Club” activities. It also facilitates partnership programs with spaces leased by local and state governmental agencies, local non-profit organizations, and the Confederated Tribes of the Umatilla Indian Reservation. The WEC also 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.
# Transfer Degrees Summary Chart

For all transfer option 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>
</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 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 Nursing</td>
<td>This is a dual-purpose degree intended to prepare students for the National Council Licensure Examination for Registered Nursing (NCLEX-RN). A limited number of additional pre-requisites/support courses are required for direct transfer. Please see the degree for articulation details.</td>
<td>83</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 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>
<tr>
<td>Associate in Applied Science–T Water Resources Technology</td>
<td>This is a dual-purpose degree intended to prepare students for employment in Water Resources Technology and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>113</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.
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 (509.758.1718) in Clarkson.

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.

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 who 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.

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
- Trinity Lutheran College
- University of Washington
- University of Washington - Bothell
- University of Washington - Tacoma
- Washington State University
- Washington State University - Tri-Cities
- Washington State University - Vancouver
- Western Washington University
- Whitworth College

Other Transfer Agreements

Walla Walla Community College has articulation agreements with a number of baccalaureate institutions such as 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.

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>[C] 13</td>
</tr>
<tr>
<td>*Diversity</td>
<td>[^D]</td>
</tr>
<tr>
<td>Humanities</td>
<td>[H][HP] 15</td>
</tr>
<tr>
<td>Natural Science</td>
<td>[NS] 15</td>
</tr>
<tr>
<td>Quantitative Skills</td>
<td>[Q] 5</td>
</tr>
<tr>
<td>Social Science</td>
<td>[SS] 15</td>
</tr>
<tr>
<td>Physical Education</td>
<td>[PE] 3</td>
</tr>
<tr>
<td>Electives</td>
<td>24</td>
</tr>
<tr>
<td><strong>AA-DTA Degree Total</strong></td>
<td><strong>90 credits</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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 124</td>
<td>Women Artists in History</td>
</tr>
<tr>
<td>CMST 201</td>
<td>Intercultural Communications</td>
</tr>
<tr>
<td>(formerly SPCH 201)</td>
<td></td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Myth and Folklore</td>
</tr>
<tr>
<td>(formerly LIT 210)</td>
<td></td>
</tr>
<tr>
<td>ENGL 245</td>
<td>American Literature</td>
</tr>
<tr>
<td>(formerly LIT 245)</td>
<td></td>
</tr>
<tr>
<td>ENGL 251</td>
<td>Voices of Women in Literature</td>
</tr>
<tr>
<td>(formerly LIT 251)</td>
<td></td>
</tr>
<tr>
<td>ENGL 265</td>
<td>World Literature</td>
</tr>
<tr>
<td>(formerly LIT 265)</td>
<td></td>
</tr>
<tr>
<td>HIST 250</td>
<td>Introduction to Latin America</td>
</tr>
<tr>
<td>(formerly HIST 280)</td>
<td></td>
</tr>
<tr>
<td>HPER 268</td>
<td>Diversity in Sports</td>
</tr>
<tr>
<td>HUM 107</td>
<td>Gender Perceptions in American Film</td>
</tr>
<tr>
<td>HUM 110</td>
<td>Four Perspectives in the History of Ideas</td>
</tr>
<tr>
<td>MUSC&amp; 105</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>(formerly MUS 101)</td>
<td></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. Two different options are offered: 1) biological science, chemistry, geology, environmental/resource sciences, and earth science or 2) computer science, physics, atmospheric science, and engineering. This degree allows students to concentrate on fulfilling pre-major coursework in their intended field of study.

The Associate in Science (AS) Degree, is a 90 credit program designed to parallel with the first two years of a baccalaureate institution to which they intend to transfer. 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**

This 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 097: Expository Writing
- 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
- MATH: Mathematics to include Math 72B, Math 74C, Math 78E or higher
- 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: 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.*

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

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

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

Workforce Program Information

Professional-Technical programs provide instruction in the knowledge and skills required in a wide variety of occupations that demand education beyond high school. Students prepare for employment by completing a two-year Associate degree 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) unduplicated 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.

*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 May 2014
My Plan

Communications (C) - 13 Credits

Humanities (H) (HP) - 15 Credits

Social Sciences (SS) - 15 Credits

Quantitative Skills (Q) - 5 Credits

Natural Sciences (NS) - 15 Credits

Physical Activities - 3 Courses

Electives - 34 Credits

Diversity - 1 Course

Course Placements:  Reading __  English  Math_________

Notes

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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

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

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

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

- **PHYSICAL ED [PE]**
  Three (3) unduplicated 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.

*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 May 2014.
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 > Academic Tab > Degree Audit.

Natural Sciences (NS) - 30 Credits
- Biology/Physics Sequence
- Chemistry Sequence
- Additional Natural Sciences - 10-15 Credits
- Quantitative Skills (Q) - 15 Credits
- Communications (C) - 5 Credits
- Humanities and Social Sciences (H, HP, SS) - 15 Credits
- Physical Activities - 3 Courses
- Electives - 12 Credits

Notes

__________________________

__________________________

__________________________

__________________________

__________________________

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.

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

- **NAUTRAL SCIENCE [NS]**
  20 credits required:
  - Physics Sequence: 15 credits. Sequence should not be broken up between institutions.
    PHY&114, College Physics I
    PHY&115, College Physics II
    PHY&116, College Physics III
  or
    PHY&221, Engineering Physics I
    PHY&222, Engineering Physics II
    PHY&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) unduplicated 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.

---

*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 May 2014.

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

---

**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.

**Note:** not all classes are offered every quarter.
# 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 -> Academic Tab -> Degree Audit.

## Communications (C) - 5 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Humanities and Social Sciences (H) (HP) (SS) - 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Quantitative Skills (Q) - 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Physics (NS) - 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Natural Sciences (NS) - 5 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Physical Activities - 3 Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Electives - 32 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**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. 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 SCIENCES [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 for Majors; a full year sequence of Physics for Science Majors; 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 201, Statistics (a course that includes descriptive and inferential statistics) may substitute for Calculus I at some institutions; students are encouraged to check with the transfer institution early in their decision process to confirm requirements.

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

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

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communications [C]</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Quantitative Skills [Q]</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Humanities [H][HP]</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Social Sciences [SS]</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Natural Science [NS]</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

**Course Placements:**
- **Reading**
- **English**
- **Math**

---

**Notes**

---

**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.

**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; MATH&254, 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 the International Business major should consult their potential transfer institutions regarding the level of world language required for admission to the major. University of Idaho recommends one of these courses be PHIL 131, Introduction to Ethics.

**SOCIAL SCIENCE [SS]**
15 credits required. Required courses: ECON& 201, Microeconomics and ECON& 202, Macroeconomics. Additional course must be from a subject area other than Economics.
- **Note:** WSU requires either PSYC& 100 or SOC& 101 for the additional Social Science credits. University of Idaho recommends PSYC& 100.

**NATURAL SCIENCE [NS]**
15 credits required. One course must have a lab. Required course: MATH 201, 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.

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 May 2014
# My Plan

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications [C]</td>
<td>10</td>
</tr>
<tr>
<td>Quantitative Skills [Q]</td>
<td>10</td>
</tr>
<tr>
<td>Humanities [H] [HP]</td>
<td>15</td>
</tr>
<tr>
<td>Social Sciences [SS]</td>
<td>15</td>
</tr>
<tr>
<td>Natural Sciences [NS]</td>
<td>15</td>
</tr>
<tr>
<td>Business Specific Courses</td>
<td>20</td>
</tr>
<tr>
<td>General Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

### Notes

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.

### Course Placements:

- Reading ____________
- English ____________
- Math _____________
Associate in Math Education DTA/MRP

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

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

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

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

Course Designators and Requirements

• COMMUNICATIONS [C]
  15 credits are required in the following courses:
  ENGL& 101, English Composition I, or
  ENGL 104, Advanced English Composition
  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 Diversity elective.

Note: not all classes are offered every quarter.
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 May 2014.
You can access your academic plan created by your advisor through MyWWCC -> Advising/Registration -> Planned Schedules. Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Credits</th>
<th>Course Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications [C]</td>
<td>135</td>
<td>ENGL&amp; 202</td>
<td>5</td>
</tr>
<tr>
<td>Humanites [H] [HP]</td>
<td>10</td>
<td>CMST&amp; 220</td>
<td>5</td>
</tr>
<tr>
<td>Social Sciences [SS]</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Skills [Q]</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences [NS]</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Core [EC]</td>
<td>8</td>
<td>EDUC&amp; 202</td>
<td>5</td>
</tr>
<tr>
<td>Electives</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

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
- Associates in Biology – DTA
- Associates in Business – DTA
- Associates in Math Education – DTA

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& 116, 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 College and transfer seamlessly between institutions.

- Non-Lab Science course.

* Note: not all classes are offered every quarter.

Information is subject to change. See wwcc.edu/schedule for the most current courses. Document updated May 14, 2014.
### Communications [C]

<table>
<thead>
<tr>
<th>English I</th>
<th>Communication Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL &amp; 101 English Composition I [C]</td>
<td>CMST 102 Interpersonal Communication [C]</td>
</tr>
<tr>
<td>ENGL 104 Advanced English Composition</td>
<td>CMST 201 Intercultural Communication [C]</td>
</tr>
</tbody>
</table>

### Humanities [H] / Performance & Fine Arts [HP]

#### Art
- ART & 100 Art Appreciation [C] .......................... 5
- ART 124 Women Artists in History [E] .................. 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

#### Drama
- DRMA & 101 Introduction to Theatre ...................... 5
- DRMA 225 Representative Plays ........................... 5
- DRMA 281 Beginning Playwriting ........................... 5

#### English Literature
- ENGL & 111 Introduction to Literature [C] .............. 5
- ENGL & 124 English Composition II [C] .................. 5
- ENGL & 127 History of English Literature ............... 5
- ENGL & 128 History of English Literature ............... 5
- ENGL & 129 History of English Literature ............... 5
- ENGL 115 History of the British Isles .................... 3
- ENGL 160 Myth & Folklore ................................. 5
- ENGL 210 Myths & Folklore [C] ............................ 5
- ENGL 220 African-American Literature .................. 5
- ENGL 245 American Literature [C] ....................... 5
- ENGL 246 Literature of the British Isles ................. 5
- ENGL 251 Voices of Women in Literature [E] .......... 5
- ENGL 257 Literature of the Inland Northwest ........... 5
- ENGL 261 Native American Literature .................. 3
- ENGL 265 World Literature [C] ............................ 5
- ENGL 270 Detective & Spy Literature .................... 3
- ENGL 271 Science Fiction & Fantasy Literature .......... 5
- ENGL 277 The Bible as Literature ....................... 5

#### History
- HIST & 116 Western Civilization I [E] ................. 5
- HIST & 117 Western Civilization II [E] ................. 5
- HIST & 126 World Civilization I [E] ..................... 5
- HIST & 127 World Civilization II [E] .................... 5
- HIST & 128 World Civilization III [E] ................... 5

#### Humanities
- HUM 106 Film Technique & Artistry .................... 5
- HUM 107 Gender & Race in American Films [E] ....... 5
- HUM 109 World Arts & Culture ........................... 5
- HUM 110 Four Perspectives [E] ........................... 5
- HUM & 116 Humanities I .................................. 5
- HUM & 117 Humanities II .................................. 5
- HUM & 118 Humanities III ............................... 5

#### Modern Languages
- FRCH 121/122/123 French I, II, III ...................... 5 ea.
- FRCH 201/202/203 French IV, V, VI ...................... 5 ea.
- SPAN 121/122/123 Spanish I, II, III ...................... 5 ea.
- SPAN 212/212/223 Spanish IV, V, VI ..................... 5 ea.

#### Music
- MUSC & 105 Music Appreciation [E] ..................... 5
- MUSC 110 History of American Music ................... 5
- MUSC & 141/142/143 Music Theory I, II, III .......... 5 ea.

#### Performance/Fine Arts [HP]
- ART 107 Fundamentals of Digital Art .................... 5
- ART 111 Intro to Studio Art Practices ................... 4
- ART 115 Drawing for Art Science ....................... 1
- 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 [E] ............ 5
- PHIL 103 Asian Philosophy [E] .......................... 5
- PHIL & 117 Traditional Logic ............................. 5
- PHIL 120 Critical Thinking ............................... 5
- PHIL 131 Introduction to Ethics .......................... 5
- PHIL 152 Social and Political Philosophy ................. 5
- PHIL 205 Philosophy of Religion .......................... 5

#### Women’s Studies
- WST 124 Women Artists in History [E] ................. 5
- WST 251 Voices of Women in Literature [E] ............ 5

---

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

#### Social Science [SS]

<table>
<thead>
<tr>
<th>Anthropology</th>
<th>Political Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH&amp; 100</td>
<td>AGRI 222 Agriculture Policy</td>
</tr>
<tr>
<td>ANTH&amp; 206</td>
<td>POLS 120 The American Presidency</td>
</tr>
<tr>
<td></td>
<td>POLS 202 American Government</td>
</tr>
<tr>
<td></td>
<td>POLS 204 Constitutional Law</td>
</tr>
<tr>
<td></td>
<td>POLS 211 U.S. in World Affairs I</td>
</tr>
<tr>
<td></td>
<td>POLS 212 U.S. in World Affairs II</td>
</tr>
<tr>
<td></td>
<td>POLS 222 Agricultural Policy</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 153 Calculus IV</td>
</tr>
<tr>
<td></td>
<td>MATH 206 Math for Elem School Teachers II</td>
</tr>
<tr>
<td></td>
<td>MATH 220 Linear Algebra</td>
</tr>
<tr>
<td></td>
<td>MATH 238 Differential Equations</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 254 Calculus IV</td>
</tr>
<tr>
<td></td>
<td>PHIL&amp; 117 Traditional Logic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business</th>
<th>Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS&amp; 101 Intro to Business C</td>
<td>PSYC&amp; 100 General Psychology C</td>
</tr>
<tr>
<td></td>
<td>PSYC 111 Psychology of Relationships</td>
</tr>
<tr>
<td></td>
<td>PSYC 113 Human Sexuality</td>
</tr>
<tr>
<td></td>
<td>PSYC 139 Psychology of Women</td>
</tr>
<tr>
<td></td>
<td>PSYC 160 Psychology of Crim. Behavior</td>
</tr>
<tr>
<td></td>
<td>PSYC&amp; 200 Lifespan Psychology C</td>
</tr>
<tr>
<td></td>
<td>PSYC 205 Social Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 207 Psychology of Personality</td>
</tr>
<tr>
<td></td>
<td>PSYC 219 Health Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC&amp; 220 Abnormal Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 244 Environmental Psychology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criminal Justice</th>
<th>Sociology</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ&amp; 101 Intro to Criminal Justice b</td>
<td>SOC&amp; 101 Intro to Sociology C</td>
</tr>
<tr>
<td>CJ&amp; 110 Criminal Law .</td>
<td>SOC 150 Intro to Social Work</td>
</tr>
<tr>
<td>CJ&amp; 112 Criminology</td>
<td>SOC&amp; 201 Social Problems C</td>
</tr>
<tr>
<td>CJ 202 Crime &amp; Delinquency b</td>
<td>SOC 204 Drugs and Society C</td>
</tr>
<tr>
<td></td>
<td>SOC 205 Racial &amp; Ethnic Relations C</td>
</tr>
<tr>
<td></td>
<td>SOC 206 Social Ger. &amp; Aging Rev C</td>
</tr>
<tr>
<td></td>
<td>SOC 208 Soc of Int. &amp; Family Rel. C</td>
</tr>
<tr>
<td></td>
<td>SOC 210 Contemporary Social Issues</td>
</tr>
<tr>
<td></td>
<td>SOC 220 Gender &amp; Society C</td>
</tr>
<tr>
<td></td>
<td>SOC 230 Medical Sociology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economics</th>
<th>Women's Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 201 Microeconomics in Agriculture</td>
<td>WST 113 Human Sexuality C</td>
</tr>
<tr>
<td>ECON 200 Survey of Economics</td>
<td>WST 139 Psychology of Women</td>
</tr>
<tr>
<td>ECON&amp; 201 Micro Economics</td>
<td>WST 200 Women in U.S. History</td>
</tr>
<tr>
<td>ECON&amp; 202 Macro Economics</td>
<td>WST 220 Gender &amp; Society C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Quantitative Skills/Reasoning [Q]</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 202 Intro to Education</td>
<td>MATH 201 Intro to Statistics C</td>
</tr>
<tr>
<td></td>
<td>MATH 115 Finite Math</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 141 Precalculus I C</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 142 Precalculus II</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 148 Business Calculus</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 151 Calculus I</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 152 Calculus II</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 153 Calculus III</td>
</tr>
<tr>
<td></td>
<td>MATH 206 Math for Elem School Teachers II</td>
</tr>
<tr>
<td></td>
<td>MATH 220 Linear Algebra</td>
</tr>
<tr>
<td></td>
<td>MATH 238 Differential Equations</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 254 Calculus IV</td>
</tr>
<tr>
<td></td>
<td>PHIL&amp; 117 Traditional Logic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geography</th>
<th>Symbolic Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 201 Intro to World Reg Geography</td>
<td>MATH 201 Intro to Statistics C</td>
</tr>
<tr>
<td>GEOG&amp; 207 Economic Geography</td>
<td>MATH&amp; 256 Calculus IV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History</th>
<th>Sociology</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST&amp; 116 Western Civilization I</td>
<td>SOC&amp; 101 Intro to Sociology C</td>
</tr>
<tr>
<td>HIST&amp; 117 Western Civilization II</td>
<td>SOC 150 Intro to Social Work</td>
</tr>
<tr>
<td>HIST&amp; 118 Western Civilization III</td>
<td>SOC&amp; 201 Social Problems C</td>
</tr>
<tr>
<td>HIST 120 American Presidency</td>
<td>SOC 204 Drugs and Society C</td>
</tr>
<tr>
<td>HIST 126 World Civilization</td>
<td>SOC 205 Racial &amp; Ethnic Relations C</td>
</tr>
<tr>
<td>HIST&amp; 127 World Civilization II</td>
<td>SOC 206 Social Ger. &amp; Aging Rev C</td>
</tr>
<tr>
<td>HIST&amp; 128 World Civilization III</td>
<td>SOC 208 Soc of Int. &amp; Family Rel. C</td>
</tr>
<tr>
<td>HIST 146 US History I</td>
<td>SOC 210 Contemporary Social Issues</td>
</tr>
<tr>
<td>HIST 147 US History II</td>
<td>SOC 220 Gender &amp; Society C</td>
</tr>
<tr>
<td>HIST 148 US History III</td>
<td>SOC 230 Medical Sociology</td>
</tr>
<tr>
<td>HIST 205 American Environmental Hist.</td>
<td>WST 113 Human Sexuality C</td>
</tr>
<tr>
<td>HIST 211 U.S. in World Affairs I</td>
<td>WST 139 Psychology of Women</td>
</tr>
<tr>
<td>HIST 212 U.S. in World Affairs II</td>
<td>WST 200 Women in U.S. History</td>
</tr>
<tr>
<td>HIST&amp; 214 Pacific NW History</td>
<td>WST 220 Gender &amp; Society C</td>
</tr>
<tr>
<td>HIST&amp; 215 Women in US History</td>
<td>WST 238 Differential Equations</td>
</tr>
<tr>
<td>HIST 250 Intro to Latin America</td>
<td>WST 244 Environmental Psychology</td>
</tr>
<tr>
<td>HIST 255 Traditional East Asian Civ.</td>
<td>MATH 201 Intro to Statistics C</td>
</tr>
<tr>
<td>HIST 256 Modern East Asian Civilization</td>
<td>MATH&amp; 256 Calculus IV</td>
</tr>
<tr>
<td>HIST 262 The Modern Middle East</td>
<td>MATH&amp; 256 Calculus IV</td>
</tr>
</tbody>
</table>

---

FOR THE MOST CURRENT INFORMATION SEE: 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 & Cosm 5

Biology
- BIOL& 100 Survey of Biology 5
- BIOL& 160 General Biology 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

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& 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. Chemistry Prep + 5
- CHEM& 161 General Chemistry I 5
- CHEM& 162 General Chemistry II 5
- CHEM& 163 General Chemistry III 5

Environmental Science
- ENVS& 101 Intro to Environ. Science 5

Geography
- GEOG 105 Physical Geography 5
- GEOG 170 Intro to Maps & Cartography 5
- GEOG 210 Intro to Weather 5
- GEOG 211 Intro to Climate & Climate Change 5

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

Mathematics
- MATH& 107 Math in Society 5
- MATH 115 Finite Math 5
- MATH& 141 Precalculus I C + 5
- MATH& 142 Precalculus II 5
- MATH& 148 Business Calculus C + 5
- MATH& 151 Calculus I 5
- MATH& 152 Calculus II 5
- MATH& 153 Calculus III 5
- MATH 201 Intro to Statistics C 5
- MATH 205 Math for Elem Teachers I 5
- MATH 206 Math for Elem Teachers II 5
- MATH 220 Linear Algebra 5
- MATH 238 Differential Equations 5
- MATH& 254 Calculus IV 5

Nutrition
- NUTR& 101 Nutrition C + 5

Oceanography
- OCEA& 101 Intro to Oceanography 5

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

Optional Transferable Electives
- ALCDA 231 Survey of Chemical Dependency 5
- BUS& 201 Business Law I 5
- CS 115 Intro to Computer & Information Technology 5
- CS 131 Computers Science I C++ 5
- CS 141 Computer Science I JAVA 5
- EDUC 111 Teaching and Learning Lab . 1-3
- EDUC& 115 Child Development 5
- EDUC& 203 Exceptional Child 5
- ENGR& 111 Engineering Graphics I 5
- ENGR& 214 Statics 5
- ENGR& 215 Dynamics 5
- ENGR& 225 Mechanics of Materials 5
- ENGR& 228 Stress Management 5
- ENGR& 251 Stress Management 5
- ENGR& 264 Outdoor Recreation 5
- ENGR& 268 Divers. in Sports 5
- ENGR& 273 Fitness for Life 5
- ENGR& 274 Personal & Community Health & Hygiene 5
- ENGR& 282 Athletic Training Lab 5

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Areas of Study
ACCOUNTING TECHNOLOGY

Accounting Technology

AAAS, CERT
http://wwcc.edu/accounting

Frank Lyons 509.527.4234 francis.lyons@wwcc.edu
Linda Lane- Clk 509.758.1724 linda.lane@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

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

Program Level Outcomes:

• Program completers will demonstrate technical competency in core ability and related instruction curriculum components.

• Student and employer satisfaction will reflect a high degree of self-esteem, self-confidence and the potential to grow within that job or business.

• Students completing the AAAS degree will become employed in a living wage job, with benefits.

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

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

Entrance Requirements: Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. 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.wtb.wa.gov/etp.

Degrees

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] [Online (partial)]

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

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>0.5</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202, Principles of Accounting II</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 136, Business Communications I</td>
<td>0.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>0.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203, Principles of Accounting III</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 137, Business Communications II (W)</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 217, Computer Software Applications</td>
<td>0.5</td>
</tr>
<tr>
<td>OT 218, Desktop Calculator</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | 60

## Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 204, Intermediate Accounting I</td>
<td>0.5</td>
</tr>
<tr>
<td>ACCT 216, Principles of Income Tax</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 205, Intermediate Accounting II</td>
<td>0.5</td>
</tr>
<tr>
<td>ACCT 209, Cost Accounting</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 192, Business Leadership Seminar I (L)</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 115, Integrated Computer Applications</td>
<td>0.5</td>
</tr>
<tr>
<td>ACCT 175, Payroll Accounting</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 291, Cooperative Work Experience III</td>
<td>2 - 5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (J)</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15-18</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** | 43-45

**Grand Total** | 103-105

---

### Bookkeeping Certificate

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

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

**Degree Outcomes:**

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

---

## Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>0.5</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 137, Business Communications I</td>
<td>0.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>0.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 115, Integrated Computer Applications</td>
<td>0.5</td>
</tr>
<tr>
<td>ACCT 175, Payroll Accounting</td>
<td>0.5</td>
</tr>
<tr>
<td>BUS 291, Cooperative Work Experience III</td>
<td>2 - 5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (J)</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20-23</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | 65-68

**Grand Total** | 65-68

---

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Adult Basic Education courses serve adults (18 years or older) who need to upgrade their skills in reading, writing, and math. Students are administered a placement test upon entry. This test is a Washington State requirement and is for placement purposes only. Program of study is then determined individually. Instruction is offered via individual study, structured courses, learning communities, and computers. The program is provided in both English and Bilingual/Spanish to meet individual student needs.

Program Level Outcomes: ABE/GED® Reading
- Determine the reading purpose.
- Select reading strategies appropriate to the purpose.
- Monitor comprehension and adjust reading strategies.
- Analyze the information and reflect on its underlying meaning.
- Integrate it with prior knowledge to address reading purpose.

ABE/GED® Writing
- Determine the purpose for communicating.
- Organize and present information to serve the purpose.
- Pay attention to conventions of English language usage, including grammar, spelling, and sentence structure, to minimize barriers to reader’s comprehension.
- Seek feedback and revise to enhance the effectiveness of the communication.

ABE/GED® Math
- Understand, interpret, and work with pictures, numbers, and symbolic information.
- Apply knowledge of mathematical concepts and procedures to figure out how to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

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

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

Department Overview: Adult Basic Education / GED® is designed to enable those who have not completed high school to earn the General Education Development (GED®). Adult Basic Education also serves those needing a review of basic skills before entering other college programs.

Adult Basic Education / GED® courses serve adults (18 years or older) who need to upgrade their skills in reading, writing, and math. Students are administered a placement test upon entry. This test is a Washington State requirement and is for placement purposes only. Program of study is then determined individually. Instruction is offered via individual study, structured courses, learning communities, and computers. The program is provided in both English and Bilingual/Spanish to meet individual student needs.

Program Level Outcomes: ABE/GED® Reading
- Determine the purpose for communicating.
- Determine the degree of precision required by the situation.
- Solve problems using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables and algebraic models.

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

Department Overview: Adult Basic Education / GED® is designed to enable those who have not completed high school to earn the General Education Development (GED®). Adult Basic Education also serves those needing a review of basic skills before entering other college programs.

Program Level Outcomes: ABE/GED® Writing
- Determine the purpose for communicating.
- Determine the degree of precision required by the situation.
- Solve problems using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables and algebraic models.

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

Department Overview: Adult Basic Education / GED® is designed to enable those who have not completed high school to earn the General Education Development (GED®). Adult Basic Education also serves those needing a review of basic skills before entering other college programs.

Program Level Outcomes: ABE/GED® Math
- Determine the purpose for communicating.
- Determine the degree of precision required by the situation.
- Solve problems using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables and algebraic models.

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

Department Overview: Adult Basic Education / GED® is designed to enable those who have not completed high school to earn the General Education Development (GED®). Adult Basic Education also serves those needing a review of basic skills before entering other college programs.

Program Level Outcomes: ABE/GED® Writing
- Determine the purpose for communicating.
- Determine the degree of precision required by the situation.
- Solve problems using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables and algebraic models.

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

Department Overview: Adult Basic Education / GED® is designed to enable those who have not completed high school to earn the General Education Development (GED®). Adult Basic Education also serves those needing a review of basic skills before entering other college programs.
- Define and select data to be used in solving the problem.
- Determine the degree of precision required by the situation.
- Solve problems using appropriate quantitative procedures and verify that the results are reasonable.
- Communicate results using a variety of mathematical representations, including graphs, charts, tables and algebraic models.

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

---

**Agriculture - Agri-Business**

**AA-DTA, AAAS, CERT**

http://wwcc.edu/agbusiness

Debora Frazier  509.527.4689  debbie.frazier@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

**Department Overview:** Agri-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 Agri-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 Agri-Business program also offers a specialized degree in Wine Marketing and Management. One-year certificates are available upon completion of the first year of study in the AAAS Degree program.

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.

**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 agri-business sector employs a large percentage of the U.S. labor force. These individuals assist the producer of food and fiber products in input procurement, marketing, financing, and management.

**Entrance Requirements:** It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

**Other Information:** The Agri-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 WWC 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.wtb.wa.gov/etp.

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

---

**Degrees**

**Associate in Arts Degree**

(emphasis in Agricultural Economics)

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. The Agriculture Department at Walla Walla Community College has articulation agreements with several regional universities.
**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.
- Explain process and influences on making laws in the U.S.

**Transferability:** Students earning the Associate in Arts Degree at WWCC have satisfied basic science and core requirements and are granted junior standing at all of the public and most private baccalaureate institutions in Washington State. For transfer information at specific institution and/or programs consult with your advisor.

**Other Information:** This is a recommended degree sequence. Consult with department advisor, transfer center staff, and college degree guidelines, for specific courses required for the Associate in Arts (AA) Degree.

---

### **Y E A R  O N E**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>.5</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking</td>
<td>.5</td>
</tr>
<tr>
<td>Physical Education Elective*</td>
<td>.1</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>Lab Science Elective*</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 102, English Composition II</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 115, Finite Mathematics</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>.5</td>
</tr>
<tr>
<td>Physical Education Elective*</td>
<td>.1</td>
</tr>
<tr>
<td>Literature Elective*</td>
<td>.5</td>
</tr>
<tr>
<td>MATH&amp; 148, Business Calculus ***</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.16</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>.52</strong></td>
</tr>
</tbody>
</table>

---

### **Y E A R  T W O**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>.5</td>
</tr>
<tr>
<td>ECON&amp; 202, Macroeconomics</td>
<td>.5</td>
</tr>
<tr>
<td>Humanities Elective*</td>
<td>.5</td>
</tr>
<tr>
<td>Social Science Elective**</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202, Principles of Accounting II</td>
<td>.5</td>
</tr>
<tr>
<td>Agriculture Elective</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 201, Introduction to Statistics</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 222, Agricultural Policy</td>
<td>.5</td>
</tr>
<tr>
<td>Physical Education Elective*</td>
<td>.1</td>
</tr>
<tr>
<td>Humanities Elective*</td>
<td>.5</td>
</tr>
<tr>
<td>Natural Science*</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.16</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>.51</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>.103</strong></td>
</tr>
</tbody>
</table>

---

**EPC: 001D**

* Refer to Associate in Arts (AA) Guidelines for approved elective courses. At least one Diversity course is required.

** Social Science elective: Any PSYC, SOC, HIST, ANTH course.

*** Students may substitute MATH& 151 for MATH& 148.

---

### Degrees

**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 agribusiness 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>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.3</td>
</tr>
<tr>
<td>AGPR 292, Leadership (L)</td>
<td>.2</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>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 210, Agricultural Sales and Service</td>
<td>.3</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 192, Cooperative Seminar (R)</td>
<td>.2</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>6 - 10</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>8-12</strong></td>
</tr>
</tbody>
</table>

### YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 110, Introduction to Livestock Production</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<tr>
<td>Agriculture Elective**</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 220, Agricultural Finance</td>
<td>.5</td>
</tr>
<tr>
<td>Agriculture Elective**</td>
<td>.5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15.4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 103, Introduction to Precision Agriculture and Farm Management</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 222, Agricultural Policy</td>
<td>.5</td>
</tr>
<tr>
<td>Agriculture Elective**</td>
<td>.5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18-20</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>48.4-50.4</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>109.4-115.4</strong></td>
</tr>
</tbody>
</table>

### Associate in Applied Arts and Sciences in Agri-Business/Wine Marketing & Management

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]

**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.
**Certificates**

**Agri-Business Certificate**

**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.
- 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**

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>EV 107, Introduction to Viticulture and Enology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 210, Agricultural Sales and Service</td>
<td>.3</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td>EV 141, Introduction to Wine Marketing</td>
<td>.3</td>
</tr>
<tr>
<td>EV 180, Wines of the World</td>
<td>.1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 192, Cooperative Seminar (R)</td>
<td>.2</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management *</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>.6</td>
</tr>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
<td>.2</td>
</tr>
<tr>
<td>EV 140, Writing for the Winery</td>
<td>.2</td>
</tr>
<tr>
<td>EV 142, Consumer Direct Wine Sales and Marketing</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Year One Total**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>

**Year Two**

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>.5</td>
</tr>
<tr>
<td>ECON &amp; 202, Macroeconomics</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT &amp; 202, Principles of Accounting II</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 220, Agricultural Finance *</td>
<td>.5</td>
</tr>
<tr>
<td>EV 108, Wine Industry Marketplace (J)</td>
<td>.3</td>
</tr>
<tr>
<td>EV 189, Sensory Analysis of Wine</td>
<td>.2</td>
</tr>
<tr>
<td>EV 299, Professional Wine Leadership (L)</td>
<td>.1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 222, Agricultural Policy</td>
<td>.5</td>
</tr>
<tr>
<td>CA 133, Food and Wine/Beverage</td>
<td>.4</td>
</tr>
<tr>
<td>CMST &amp; 220 or CMST 102 (O)</td>
<td>.3 - .5</td>
</tr>
<tr>
<td>EV 180, Wines of the World</td>
<td>.1</td>
</tr>
<tr>
<td>EV 193, Winery Operations Management</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18-20</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>49-51</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>101-103</strong></td>
</tr>
</tbody>
</table>

**Year One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.3</td>
</tr>
<tr>
<td>AGPR 292, Leadership (L)</td>
<td>.2</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>20</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 210, Agricultural Sales and Service</td>
<td>.3</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</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 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>53</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

**EPC: 110D**

Students must be at least 18 years of age and a high school graduate (or GED®) to enroll in EV courses. Students will also be required to attend an Orientation to the EV program prior to enrollment in any EV courses. Students must submit the following to the EV Department before enrollment in any EV courses: (1) Current Resume Typed, (2) Official transcripts from all colleges which the student has attended, (3) Typed Essay, 500 words or less covering the following areas:
- Why you have chosen to pursue studies in Wine Marketing.
- What positive attributes you bring to the Wine Marketing Program at WWCC.
- What you plan to accomplish with your degree.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Agri-Business - Wine Marketing and Management Certificate

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 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.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></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>EV 107, Introduction to Viticulture and Enology</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>AGRI 210, Agricultural Sales and Service</td>
<td>.3</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td>EV 141, Introduction to Wine Marketing</td>
<td>.3</td>
</tr>
<tr>
<td>EV 180, Wines of the World</td>
<td>.1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.17</td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>AGRI 192, Cooperative Seminar (L)</td>
<td>.2</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management *</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>.6</td>
</tr>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
<td>.2</td>
</tr>
<tr>
<td>EV 140, Writing for the Winery</td>
<td>.2</td>
</tr>
<tr>
<td>EV 142, Consumer Direct Wine Sales and Marketing</td>
<td>.3</td>
</tr>
</tbody>
</table>

EPC: 110E

Students must be at least 18 years of age and a high school graduate (or GED*) to enroll in EV courses. Students will also be required to attend an Orientation to the EV program, prior to enrollment in any EV courses. Students must submit the following to the EV Department before enrollment in any EV courses: (1) Current Resume Typed, (2) Official transcripts from all colleges which the student has attended, (3) Typed Essay, 500 words or less covering the following areas:

- Why you have chosen to pursue studies in Wine Marketing.
- What positive attributes you bring to the Wine Marketing Program at WWCC.
- What you plan to accomplish with your degree.

* A student can complete either AGRI 211 or AGRI 220 (since these are offered on an alternate year basis) and receive a one-year certificate.

** Students must complete related instruction requirements in the following categories to receive a certificate: Written Communications, Computation/ Mathematics, and Human Relations. Students must complete all six related instruction categories for the degree.

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</th>
</tr>
</thead>
<tbody>
<tr>
<td>J - Job Seeking Skills</td>
<td>AGRI 192</td>
</tr>
<tr>
<td>L - Leadership</td>
<td>MATH 074C, MATH 201, OCSUP 107</td>
</tr>
<tr>
<td>O - Oral Communications</td>
<td>(R) - PSYC 111</td>
</tr>
<tr>
<td>W - Written Communications</td>
<td>(L) - AGRI 192</td>
</tr>
</tbody>
</table>

AA-DTA, AAAS, CERT

http://www.wwcc.edu/agscience

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

Department Overview: Agriculture Science combines the fields of biology and chemistry with a practical understanding of crop and livestock production and 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 and livestock production and management. These objectives are accomplished with lecture/discussion periods, lab exercises, and field trips to production enterprise areas. Some 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
• 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 or Animal 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. The Animal Science option focuses on livestock production, animal nutrition and health, and practical meat cutting. A Plant and Soil Science or Animal Science Certificate, are available upon completion of the first year of study.

For those students interested in attending a baccalaureate institution, WWCC offers a number of direct transfer degrees in Agriculture Science. This allows students to complete the first two-years at WWCC before transferring to a baccalaureate institution.

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: 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:

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.wtb.wa.gov/etp.

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

Degrees

Associate in Applied Arts and Sciences - Ag Science and Technology - 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 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.

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

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 112, Feeds and Feeding</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 292, Leadership (L)</td>
<td>2</td>
</tr>
<tr>
<td>AGRI 220, Agricultural Finance</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 115, Animal Health &amp; Disease</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20.4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>6-10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>68.4-72.4</strong></td>
</tr>
</tbody>
</table>
Agriculture Science combines the study of plants and soil sciences to manage resources for crop and livestock production. It includes understanding the interaction between living organisms and their environment, as well as the physical and chemical properties of soils. The program prepares students for careers in the agricultural industry by offering courses in plant and soils science, animal nutrition, and management. This technical certificate is designed for students who have completed high school or equivalent education. The curriculum is structured to provide a foundation in the basic sciences and hands-on training in crop and livestock management. The program includes courses on plant anatomy and morphology, animal nutrition, and soil and water management. Students will also gain practical experience through lab exercises and field trips. The program adheres to national and state skill standards and is approved by the Washington State Board for Community and Technical Colleges. The curriculum is reviewed by an advisory committee composed of local and regional industry members. Some courses are available for distance learning, and the program is offered online (partial). 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 or Animal 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. The Animal Science option focuses on livestock production, animal nutrition and health, and practical meat cutting. A Plant and Soil Science or Animal Science Certificate, are available upon completion of the first year of study.

For those students interested in attending a baccalaureate institution, WWCC offers a number of direct transfer degrees in Agriculture Science. This allows students to complete the first two-years at WWCC before transferring to a baccalaureate institution.

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: 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:

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.wtb.wa.gov/etp.

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

Degrees

Associate in Applied Arts and Sciences Degree in Agriculture Science and Technology - Plant and Soil Science

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

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Develop an integrated weed control program that will adequately control the weed population when given a certain crop and the weeds that are considered problems.
- Perform calculations to determine the amount of herbicide to add to the spray tank and the amount of chemical applied to the target area with 1% tolerance limits when given a sample problem.
- Recognize how the quality of crop products produced relates to the nutritional requirements of farm animals.
- Develop a 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.
### Degree in Agriculture - Plant and Soils Science

#### 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.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 120, Agricultural Chemistry</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.3</td>
</tr>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 292, Leadership (L)</td>
<td>.2</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20.4</strong></td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 230, Plant Diseases and Insects</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td>Quarter Four</td>
<td></td>
</tr>
<tr>
<td>AGPR 192, Cooperative Seminar (R)</td>
<td>.2</td>
</tr>
<tr>
<td>AGPR 191, Cooperative Work Experience</td>
<td>6-10</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>68.4-72.4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>AGPR 110, Introduction to Livestock Production</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 204, Water Policy</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>AGRI 202, Soils Fertility and Management</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>.5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>.3-5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13-15</strong></td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>AGRI 215, Field Crop Production</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 103, Introduction to Precision Agriculture and Farm Management</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 222, Agricultural Policy</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>46-48</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>114.4-120.4</strong></td>
</tr>
</tbody>
</table>

EPC: 105A

*Certificate may be earned by completing the first three quarters of this program. The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- **(J)** - AGPR 100
- **(W)** - ENGL 097, ENGL 101
- **(L)** - AGPR 292
- **(M)** - MATH 074C, OCSUP 107
- **(O)** - CMST 102, CMST & 220
- **(R)** - AGRI 192

---

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

Agriculture Science and Technology - Plant and Soil Science Certificate

This certificate is equivalent to the first year of the AAAS Degree in Agriculture Science and Technology - Plant and Soil Science.

Degree available at/via: [Walla Walla]

Degree Outcomes:

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

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 120, Agricultural Chemistry</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.3</td>
</tr>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 292, Leadership (L)</td>
<td>.2</td>
</tr>
<tr>
<td>MATH 074C, Beginning Algebra I - Linear Equations (M)</td>
<td>.5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 230, Plant Diseases and Insects</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
<tr>
<td>Year One Total</td>
<td>60.4</td>
</tr>
<tr>
<td>Grand Total</td>
<td>60.4</td>
</tr>
</tbody>
</table>

EPC: 105E

*Approved Electives for Agri-Science and Technology Degree: Any course with a prefix of AGRI, AGPR, DT, ENT, EV, TURF, WELD and WTM may be used to meet the agriculture elective requirement.

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

- **(J)** - AGPR 100
- **(W)** - ENGL 097, ENGL& 101
- **(L)** - AGPR 292
- **(M)** - MATH 074C, OCSUP 107
- **(J)** - Job Seeking Skills

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Medical Assisting, Spanish Medical Interpreter, Chemical Dependency Counseling, 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. The following is a list of courses offered to help students obtain necessary state requirements and/or provide enrichment for increased information: Nursing Assistant Training Program, Nurse Delegation, Introduction to Health Services, Phlebotomy, AIDS Education, AIDS/Blood Borne Pathogens Training, Chemical Dependency Counseling Education, OTEP Training, Medic First Aid, Medic First Aid Recertification, and CPR (Heartsaver, Healthcare Provider, Pediatric-Basic), CPR Instructor Certification and Recertification.

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 or Spanish in order to obtain the minimum level of oral, written or reading proficiency in both languages. 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 509.527.4589 to schedule an appointment to take this test.

Certificates

Nursing Assistant (NA)
The Nursing Assistant program provides training in basic nursing care under state and federal guidelines.

Degree 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.

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

EPC: 329

Certificates

Emergency Medical Technician (EMT)
The Emergency Medical Technician training endorsement provides the student with the basic knowledge necessary to improve the quality of emergency care in a pre-hospital setting to victims of accidents or illness. Students who successfully complete the program will be eligible to take the national registry exam.

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 130, Emergency Medical Technician-Basic (EMT-B) Prg 10</td>
<td>10</td>
</tr>
<tr>
<td>Total Credits</td>
<td>10</td>
</tr>
<tr>
<td>Year One Total</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>10</td>
</tr>
</tbody>
</table>

EPC: 364

Certificates

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 or Spanish in order to obtain the minimum level of oral, written or reading proficiency in both languages. 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 509.527.4589 to schedule an appointment to take this test.

Certificates

Nursing Assistant (NA)
The Nursing Assistant program provides training in basic nursing care under state and federal guidelines.

Degree 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.

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

EPC: 329

Certificates

Emergency Medical Technician (EMT)
The Emergency Medical Technician training endorsement provides the student with the basic knowledge necessary to improve the quality of emergency care in a pre-hospital setting to victims of accidents or illness. Students who successfully complete the program will be eligible to take the national registry exam.

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 130, Emergency Medical Technician-Basic (EMT-B) Prg 10</td>
<td>10</td>
</tr>
<tr>
<td>Total Credits</td>
<td>10</td>
</tr>
<tr>
<td>Year One Total</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>10</td>
</tr>
</tbody>
</table>

EPC: 364

Certificates

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 or Spanish in order to obtain the minimum level of oral, written or reading proficiency in both languages. 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 509.527.4589 to schedule an appointment to take this test.

Certificates

Nursing Assistant (NA)
The Nursing Assistant program provides training in basic nursing care under state and federal guidelines.

Degree 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.

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

EPC: 329

Certificates

Emergency Medical Technician (EMT)
The Emergency Medical Technician training endorsement provides the student with the basic knowledge necessary to improve the quality of emergency care in a pre-hospital setting to victims of accidents or illness. Students who successfully complete the program will be eligible to take the national registry exam.

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 130, Emergency Medical Technician-Basic (EMT-B) Prg 10</td>
<td>10</td>
</tr>
<tr>
<td>Total Credits</td>
<td>10</td>
</tr>
<tr>
<td>Year One Total</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>10</td>
</tr>
</tbody>
</table>

EPC: 364

Certificates

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 or Spanish in order to obtain the minimum level of oral, written or reading proficiency in both languages. 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 509.527.4589 to schedule an appointment to take this test.

Certificates

Nursing Assistant (NA)
The Nursing Assistant program provides training in basic nursing care under state and federal guidelines.

Degree 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.

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

EPC: 329

Certificates

Emergency Medical Technician (EMT)
The Emergency Medical Technician training endorsement provides the student with the basic knowledge necessary to improve the quality of emergency care in a pre-hospital setting to victims of accidents or illness. Students who successfully complete the program will be eligible to take the national registry exam.

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 130, Emergency Medical Technician-Basic (EMT-B) Prg 10</td>
<td>10</td>
</tr>
<tr>
<td>Total Credits</td>
<td>10</td>
</tr>
<tr>
<td>Year One Total</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>10</td>
</tr>
</tbody>
</table>

EPC: 364

Certificates

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 or Spanish in order to obtain the minimum level of oral, written or reading proficiency in both languages. 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 509.527.4589 to schedule an appointment to take this test.

Certificates
Spanish Medical Interpreter Certificate

Certificate available at/via: [Walla Walla]

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.

Program Level Outcomes:

- To ensure Spanish Medical Interpreter program graduates have the knowledge base necessary for employment as a Medical Interpreter, Social Service Interpreter and Medical Translator
- To prepare Spanish Medical Interpreter program graduates for successful completion of certification examinations.
- To enable regional healthcare and social service agencies to provide Medical/Social Interpreter services and Medical Translation to their clients through employment of Spanish Medical Interpreter program graduates.

Certificate Outcomes:

- Demonstrate a global understanding of culture difference and its application to healthcare and social service settings.
- Learn Spanish and English medical terminology related to major body systems, common prefixes, suffixes, and word roots.
- Develop knowledge of sight and written translation methodology.
- Develop knowledge of oral interpretation methodology.
- Understand the role of the interpreter and elements of communication related to interpreting.
- Demonstrate understanding of business concepts, business plans, and entrepreneurship used in the interpreting and translation industry.
- Perform the role of the Medical Interpreter/Translator in accordance with the industry, state and 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 and translation.
- Understand and abide by the ethics involved in all language access situations.
- Demonstrate professional behavior and communication in all interpretation situations.

American Sign Language

Nancy Henry 509.758.3339 nkhenry@clearwire.net

Program available at/via: [Clarkston]

Department Overview: The American Sign Language department strives to provide students with basic sign language vocabulary and exposure to deaf culture. Learn to communicate in a conversation with deaf or hearing impaired individuals and recognize facial expressions.

Anthropology

http://wwcc.edu/anthropology

Jim Peitersen 509.527.4601 james.peitersen@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

Elizabeth Harris 509.527.4651 elizabeth.matschukat@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 offers a wide range of two-dimensional and three-dimensional courses for students interested in the fine and applied arts. Students have the opportunity to experience a variety of media and perspectives on the visual arts. The curriculum is designed to be equally satisfying for individuals looking for personal enrichment as well as provide a solid foundation for individuals planning on a career in the arts. All students are welcome to enroll in art courses.

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

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

---

**Astronomy**

http://wwcc.edu/astronomy

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:**

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

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

**Program Level Outcomes:**

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

**Degrees:** Astronomy degrees at the bachelor’s level are generally offered by physics departments. Students interested in pursuing astronomy as a major, after transfer to a baccalaureate institution, should obtain an Associate in Science (AS) Degree - Option II, following the course sequence specified for physics majors.
Preparation for Success: Students interested in a major in Astronomy should take additional courses in physics, geology and mathematics.

Automotive Repair Technology

AAAS, CERT

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 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 NATEF/ASE 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 Collision 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 courses 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-power tools—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; and 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.wtb.wa.gov/etrp

Degrees

Associate in Applied Arts and Sciences Degree in Automotive Repair Technology

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

Degree available at/via: [Walla Walla]

Degree Outcomes:
• Demonstrate principles, operation, diagnosis and service of gasoline engines.
• Demonstrate principles, operation, diagnosis and service of automatic transaxles and transmissions.
• Demonstrate principles, operation, diagnosis and service of manual drivetrain systems.
• Demonstrate principles, operation, diagnosis and service of suspension and steering systems.
• Demonstrate principles, operation, diagnosis and service of brake systems.
• Demonstrate principles, operation, diagnosis and service of electrical and electronic systems.
• 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
• Provide training to develop mathematical, oral and written communication skills to problem solve effectively in an automotive repair shop.
• Demonstrate principles, operation, diagnosis and service of heating and air conditioning systems.

**YEAR ONE**

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

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 161, Electrical and Electronics</td>
<td>21</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 171, Air Conditioning and Heating</td>
<td>4</td>
</tr>
<tr>
<td>AMM 181, Suspension and Alignment</td>
<td>4</td>
</tr>
<tr>
<td>AMM 151, Engine Performance</td>
<td>13</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td>WELD 141, Welding Basics *</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>28</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>

**YEAR TWO**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 210, Engine Rebuild</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>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 224, Automatic Transmission/Transaxles</td>
<td>13</td>
</tr>
<tr>
<td>AMM 225, Manual Drive Train and Axles</td>
<td>8</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td>AMM 152, Engine Performance II</td>
<td>13</td>
</tr>
<tr>
<td>AMM 232, Air Conditioning and Heating II</td>
<td>4</td>
</tr>
<tr>
<td>AMM 242, Suspension and Alignment II</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>70</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>148</strong></td>
</tr>
</tbody>
</table>

EPC: 712

*Any welding course WELD 141, Welding Basics (4 credits) or above 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 097, ENGL& 101, WRITE 100
(L) - AMM 299
(M) - BUS 112, MATH 072B, OCSUP 106
(O) - CMST 102, CMST& 220, OCSUP 102
(R) - BUS 102, BUS 157, OCSUP 103, PSYC& 100

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 245, Brakes</td>
<td>13</td>
</tr>
<tr>
<td>AMM 145, Auto Related Industry</td>
<td>6</td>
</tr>
<tr>
<td>AMM 149, Hybrid and Alternative Fuel Vehicles</td>
<td>2</td>
</tr>
<tr>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 161, Electrical and Electronics</td>
<td>21</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM 171, Air Conditioning and Heating</td>
<td>4</td>
</tr>
<tr>
<td>AMM 181, Suspension and Alignment</td>
<td>4</td>
</tr>
<tr>
<td>AMM 151, Engine Performance</td>
<td>13</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td>WELD 141, Welding Basics *</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>28</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>78</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>

EPC: 712C

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

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

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

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
degree (one course per category required):
(J) - OCSUP 103, PSYC 140
(W) - BUS 137, ENGL 097, ENGL & 101, WRITE 100
(L) - AMM 299
(M) - BUS 112, MATH 072B, OCSUP 106
(O) - CMST 102, CMST & 220, OCSUP 102
(R) - BUS 102, BUS 157, OCSUP 101, PSYC & 100
(J) - Job Seeking Skills
(L) - Leadership
(M) - Computation/Mathematics
(O) - Oral Communications
(W) - Written Communications

BIOLOGICAL SCIENCES

Degrees

Associate in Biology - DTA

This transfer agreement ensures that a student who completes an Associate in Biology – DTA degree will have satisfied the lower division general education (or core) requirements and lower division biology requirements at the Washington public baccalaureate institutions, subject to provisos listed in the ICRC Handbook. Students must earn a cumulative grade point average of at least 2.0. Please note that admission for many biology programs is competitive, and higher GPA's and course grades are often required. It is strongly recommended that students contact the baccalaureate-granting institution early in their education to be advised if the Biology – DTA or the Associate in Science Option I would be more advisable and about additional requirements (i.e. GPA) and procedures for admission. Please refer to the Degrees section of this catalog for degree requirements.

Degrees

Associate in Science Degree - Option I

(Biology)

Recommended two-year schedule (Option I). For other degree information, students should check with their advisors, transfer center staff, and college degree guidelines. Students should also note that it is extremely important to begin sequential courses in the fall since those courses are typically offered one quarter per year.

Transferability: For transfer information at specific institution and/or programs consult with your advisor.

Year One

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM &amp; 161, General Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>MATH &amp; 141, Precalculus I or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>ENGL &amp; 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM &amp; 162, General Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>MATH &amp; 142, Precalculus II or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL &amp; 211, Majors Cellular</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 163, General Chemistry III with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Humanities or Social Science Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>

Year Two

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities Elective</td>
<td>5</td>
</tr>
<tr>
<td>Science Elective (PHYS &amp; 121 or 221 Recommended)</td>
<td>5</td>
</tr>
<tr>
<td>MATH &amp; 151, Calculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
Business Administration

AAAS, Business - DTA, CERT

http://wwcc.edu/business

Anne Nelson 509.527.4232 anne.nelson@wwcc.edu
Jennifer DeJean- Clk 509.758.1715 jennifer.dejean@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

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.

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.wtb.wa.gov/etp.

Degrees

Associate in Business - DTA

This transfer agreement ensures that a student who completes an Associate in Business - DTA degree will have satisfied the lower division general education (or core) requirements and lower division business requirements at the Washington public baccalaureate institutions, subject to the provisos listed in the ICRC Handbook. Students must earn a cumulative grade point average of at least a 2.0. Please note that admission for many business schools is competitive, and higher GPA’s and course grades are often required. It is strongly recommended that students contact the baccalaureate-granting Business School early in their Associate in Business-DTA degree to be advised about additional requirements (i.e. GPA) and procedures for admission. Please refer to the Degrees section of this catalog for degree requirements.

Degrees

Associate in Applied Arts and Sciences Degree in Business and Management

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

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

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

### Year One

#### Fall Quarter
- BUS 194, Entrepreneurship Development: 5
- BUS& 101, Intro to Business*: 5
- BUS 112, Business Mathematics (M): 5

**Total Credits:** 15

#### Winter Quarter
- ACCT& 201, Principles of Accounting I: 5
- BUS 102, Customer Service: 5
- BUS 210, Principles of Marketing**: 5
- CS 110, Introduction to Computers and Applications: 5

**Total Credits:** 20

#### Spring Quarter
- BUS 136, Business Communications I: 5
- OT 151, Microsoft Excel: 5
- BUS 157, Human Relations in Business (R): 5

**Total Credits:** 15

**Total Year One Credits:** 50

### Year Two

#### Fall Quarter
- BUS 189, Principles of Management****: 5
- BUS 217, Computer Software Applications: 5
- ECON& 201, Micro Economics: 5

**Total Credits:** 15

#### Winter Quarter
- BUS 215, eMarketing: 5
- BUS 192, Business Leadership Seminar I (J): 3
- CMST& 220, Public Speaking (O): 5
- BUS 137, Business Communications II (W): 5

**Total Credits:** 18

#### Spring Quarter
- BUS 287, Business Capstone: 5
- BUS& 201, Business Law I: 5
- BUS 291, Co-op Work Experience III: 2 - 5
- BUS 292, Business Leadership Seminar II (L): 3

**Total Credits:** 15 - 18

**Total Year Two Credits:** 48 - 51

**Total Credits:** 98 - 101

* - Students may elect to take BUS& 101, Intro to Business or BUS 110, Intro to Business for Entrepreneurs.
** - Students may elect to take BUS 210, Principles of Marketing or BUS 212, Marketing for Entrepreneurs.
**** - Students may elect to take BUS 189, Principles of Management or BUS 180, Principles of Management for Entrepreneurs or PHIL 120, Critical Thinking.

---

### Business and Management Certificate

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

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

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

**Total Year One Credits:**

#### Fall Quarter
- ACCT& 201, Principles of Accounting I: 5
- BUS 102, Customer Service: 5
- BUS& 101, Intro to Business*: 5
- BUS 112, Business Mathematics (M): 5

**Total Credits:** 20

#### Winter Quarter
- BUS 136, Business Communications I**: 5
- BUS 192, Business Leadership Seminar I: 3
- CS 110, Introduction to Computers and Applications: 5
- BUS 157, Human Relations in Business (R): 5

**Total Credits:** 18

#### Spring Quarter
- BUS 217, Computer Software Applications: 5
- BUS 292, Business Leadership Seminar II: 3
- BUS 291, Co-op Work Experience III: 2 - 5
- BUS 137, Business Communications II (W): 5

**Total Credits:** 15 - 18

**Total Year One Credits:** 53 - 56

**Total Credits:** 53 - 56

* - Students may elect to take BUS& 101, Intro to Business, or BUS 110, Intro to Business for Entrepreneurs.
** - Students may elect to take BUS 136, Business Communications I or ENGL& 101, English Composition I.

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

**Transferability:**
CIP:52.0201
EPC: 502

---

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

91
**Cardio-Pulmonary Resuscitation (CPR)**

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 correctly use discipline specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course specific technology.
Degrees: Students may earn an Associate in Science Degree - Option I (90 credits) which is designed 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.

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.

### Degrees

#### Associate in Science Degree - Option I (Chemistry)

Recommended two-year schedule (Option I). For other degree information, students should check with their advisors, transfer center staff, and college degree guidelines. Students should also note that it is extremely important to begin sequential courses in the fall since those courses are typically offered one quarter per year.

**Transferability:** For transfer information at specific institution and/or programs consult with your advisor.

#### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161, General Chemistry I with Lab</td>
<td>.5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>.1</td>
</tr>
<tr>
<td>MATH&amp; 141, Precalculus I or approved elective</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162, General Chemistry II with Lab</td>
<td>.5</td>
</tr>
<tr>
<td>Elective (contact transfer institution)</td>
<td>.2</td>
</tr>
<tr>
<td>MATH&amp; 142, Precalculus II or approved elective</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163, General Chemistry III with Lab</td>
<td>.5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>.1</td>
</tr>
<tr>
<td>Humanities or Social Science Elective</td>
<td>.5</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

#### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities Elective</td>
<td>.5</td>
</tr>
<tr>
<td>PHYS 121, General Physics I or PHYS 201, Eng Physics</td>
<td>.5</td>
</tr>
<tr>
<td>MATH&amp; 151, Calculus I</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 122, General Physics II or PHYS 202, Eng Physics</td>
<td>.5</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td>.5</td>
</tr>
<tr>
<td>MATH&amp; 152, Calculus II</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Quarter Three

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education Elective</td>
</tr>
<tr>
<td>MATH&amp; 153, Calculus III or MATH 201, Statistics</td>
</tr>
<tr>
<td>PHYS 123, General Physics III or PHYS 203, Eng Physics</td>
</tr>
<tr>
<td>Science or Math Elective</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Two Total</td>
</tr>
<tr>
<td>Grand Total</td>
</tr>
</tbody>
</table>

EPC: 004F

### College Experience

#### 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

#### AAAS, CERT

http://wwcc.edu/autobody

Daniel Norton 509.527.4569 daniel.norton@wwcc.edu

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

#### Department Overview:

Collision Repair Technology 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. WWCC uses the I-CAR curriculum, which is designed to provide students with hands-on work based learning. The program is also 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 auto body 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:

Students may earn an Associate in Applied Arts and Sciences Degree in Collision Repair Technology, upon completion of a two-year program of study. An Collision Repair Certificate is available upon completion of the first year of study in the program.
The AAAS Degree is designed for students interested in pursuing a career in the automotive industry, specifically in the area of collision repair and bodywork. This technical degree prepares the student with the knowledge and skills necessary to enter the auto body industry. This means all new designs, new products/materials, advanced manufacturing processes, hi-tech systems, and safety features are being incorporated into each new automobile. Skilled technicians will be required to repair modern vehicles.

**Industry Description:** There is a high demand for skilled auto body repair technicians. Automotive manufacturers have made revolutionary changes in automobile designs. These changes have brought new concepts to the field of auto body repair, requiring proper training to restore damaged vehicles to their factory specifications in both body repair and painting. The technology of the automobile has changed faster in the past five years than it had in the previous two decades, ensuring that the future looks great for skilled people in the collision repair field. Auto manufacturers constantly refine and change their products in response to customers’ demands and governmental regulations. This means that new models are introduced every year, and each model has different body styles and materials. Skilled technicians will be required to repair modern vehicles.

**Entrance Requirements:** It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. 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.wtb.wa.gov/etp.

### Degree Outcomes:
- Perform welding procedures and use equipment, GMAW & RSTSW to I-CAR 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.

### Associate in Applied Arts and Sciences

**Degree 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.

### Entrance Requirements:
- It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. 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.wtb.wa.gov/etp.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 161, Collision Repair</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 162, Collision Repair II</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

<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, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td>Year One Total</td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

### Year Two

<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>
<td><strong>24</strong></td>
</tr>
</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>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td>ABT 266, Damage Estimating and Shop Operation</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td>Year Two Total</td>
<td><strong>70</strong></td>
</tr>
<tr>
<td>Grand Total</td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>

### EPC: 709

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
- (W) - BUS 137, ENGL 097, ENGL & 101, WRITE 100
- (L) - ABT 299, BUS 192, OCSUP 299, POLS 125
- (M) - BUS 112, MATH 0728, OCSUP 106
- (O) - CMST 102, CMST & 220, OCSUP 102
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC & 100
- (J) - Job Seeking Skills
- (L) - Leadership
- (M) - Computation/ Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations
Certificates

Collision Repair Technology Certificate
This certificate is equivalent to the first year of the AAAS Degree in Collision Repair Technology.

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 I-CAR 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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 161, Collision Repair</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 162, Collision Repair II</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

<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, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>74</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

EPC: 709C
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - AGPR 100, BUS 292, OCSUP 103, PSYC 140
- (W) - BUS 137, ENGL 097, ENGL 101, WRITE 100
- (L) - ABT 299, BUS 192, OCSUP 299, POLS 125
- (M) - BUS 112, MATH 072B, OCSUP 106

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.

Steve Harvey Office Hours:
3pm to 4 pm Monday - Friday
(Walla Walla Campus)

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:** Students interested in receiving a Certificate must have: (1) valid CDL permit preferably from Washington State or Oregon, (2) DOT Physical form completed, (3) DMV five year history with no DWI, negligent, reckless, or hit and run infractions, and (4) drug and alcohol testing. Students may enter the program fall, winter or spring quarter.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.wtb.wa.gov/etp](http://www.wtb.wa.gov/etp).

---

## 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.

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

**Degree 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 110, Truck Driver Training</td>
<td>12</td>
</tr>
<tr>
<td>TRK 120, Truck Driver Training - Lab</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>22</strong></td>
</tr>
</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.

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

**Degree 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 Drivers 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>
</tr>
<tr>
<td>TRK 192, Cooperative Seminar</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<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: 715**

---

## Communication Studies

**http://wwcc.edu/speech**

Connie Loomer 509.524.5153 connie.loomer@wwcc.edu

Bart Preecs 509.200.4409 Barton.preecs@wwcc.edu

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

**Department Overview:** The Communication Studies department offers courses designed to increase students’ knowledge and understanding of the principles of public speaking as well as guided practice in making speeches, oral presentations, group discussions, and interpersonal communication techniques.

**Program Level Outcomes:**

- Skills in research, grammar, punctuation consistent with qualitative expectations across the curriculum.
- Critical thinking skills in written and oral argumentation, exposition, and expression.
- Attitudes and skills appropriate to receiving and sending messages openly, critically, and responsively.
- To help students develop and perfect writing skills.
- Effective listening skills.
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 Public Relations should consider taking courses in writing skills, business and marketing. Students should also have strong computer skills.

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

#### AAAS, CERT

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] [Online (partial)]

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 Arts 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.wtb.wa.gov/etp.

### Degrees

#### 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] [Online (partial)]

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>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>CS 115, Introduction to Computer &amp; Information Technology</td>
<td>5</td>
</tr>
<tr>
<td>CS 120, Networking Using Internet Technologies</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

For the most current information see: www.wwcc.edu
The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

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

## Associate in Applied Arts and Sciences Degree in Digital Design

This technical degree prepares the student for entry-level employment in the fields of digital design for the web.

**Degree available at/via:** [Walla Walla] [Online (partial)]

### 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.

### For the Most Current Information See: www.wwcc.edu

---

**Degrees**

**Associate in Applied Arts and Sciences Degree in Digital Design**

This technical degree prepares the student for entry-level employment in the fields of digital design for the web.

**Degree available at/via:** [Walla Walla] [Online (partial)]

**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.

---

**For the Most Current Information See: www.wwcc.edu**

---

**Degrees**

**Associate in Applied Arts and Sciences Degree in Digital Design**

This technical degree prepares the student for entry-level employment in the fields of digital design for the web.

**Degree available at/via:** [Walla Walla] [Online (partial)]

**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.

### For the Most Current Information See: www.wwcc.edu


**COMPUTER SCIENCE**

EPC: 507

* Students may elect to substitute CS 140, CS 142 or CS 230 for CS 121. Please note the course for substitution may only be used once in the degree sequence.

** Students may elect to substitute CS 131 or CS 230. Please note the course for substitution may only be used once in the degree sequence.

*** Students may take CS 140, CS 142 or CS 250 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 I.

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

- (J) - CS 292
- (W) - BUS 137, ENGL& 101
- (L) - CS 192
- (M) - BUS 112, MATH 078E
- (O) - CMST 102, CMST& 220
- (R) - BUS 102, PSYC& 100

- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (W) - Written Communications

- (L) - Leadership
- (O) - Oral Communications
- (R) - Human Relations

---

**Associate in Applied Arts and Sciences**

in Software Design

This technical degree provides students an understanding of computer operating systems, programming, databases, computer applications and hardware in order to solve computer related problems for a variety of business applications. Through the use of portfolio-based design, students will acquire the skills to begin immediate employment involving technical responsibility for a business’ computer related needs.

Degree available at/via: [Walla Walla] [Online (partial)]

Degree Outcomes:

- Demonstrate the ability to critically think and organize to solve computer science related problems and processes as they relate to software design.
- Demonstrate the ability to communicate effectively in oral and written form.
- Demonstrate the ability to work effectively in a team setting.
- Demonstrate knowledge of software and hardware related to software design requirements and certifications.
- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge and application of customer service skills.

---

**Year One**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>CS 115, Introduction to Computer &amp; Information Technology</td>
<td>5</td>
</tr>
<tr>
<td>CS 120, Networking Using Internet Technologies</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 121, Problem Solving with Programming *</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 130, PC Support and Maintenance I ***</td>
<td>5</td>
</tr>
<tr>
<td>CS 220, Digital Imaging Foundations</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

---

**Year Two**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 230, Visual Basic Programming</td>
<td>5</td>
</tr>
<tr>
<td>CS 235, Introduction to Database Design and Theory</td>
<td>5</td>
</tr>
<tr>
<td>CS 240, Application Integration using VBA</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 141, Computer Science I JAVA **</td>
<td>5</td>
</tr>
<tr>
<td>CS 231, Application Development</td>
<td>5</td>
</tr>
<tr>
<td>CS 245, Advanced Database Development</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 229, Dynamic Website Design with PHP MySQL</td>
<td>5</td>
</tr>
<tr>
<td>CS 241, Programming II (JAVA/C++)</td>
<td>5</td>
</tr>
<tr>
<td>CS 242, Advanced Software Development</td>
<td>5</td>
</tr>
<tr>
<td>CS 291, Cooperative Work Experience II</td>
<td>2</td>
</tr>
<tr>
<td>CS 292, Cooperative Seminar II (L)</td>
<td>1</td>
</tr>
<tr>
<td>CS 192, Cooperative Seminar I (J)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

---

EPC: 501

* Students may elect to substitute CS 140, CS 142 or CS 230 for CS 121. Please note the course for substitution may only be used once in the degree sequence.

** Students may take CS 131, CS 140, CS 142 or CS 230 for the elective course. Please note this elective course cannot be a course previously used as a substitution for another requirement.

*** Students may substitute CS 275, Windows Client for CS 130, PC Support and Maintenance I.

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 192
- (M) - BUS 112, MATH 074C
- (O) - CMST 102, CMST& 220
- (R) - BUS 102, PSYC& 100

- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (W) - Written Communications

- (L) - Leadership
- (O) - Oral Communications
- (R) - Human Relations

---

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

99
Certificates

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

Degree available at/via: [Walla Walla] [Online (partial)]

Degree 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.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>CS Elective</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Elective</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>CS Elective</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Elective</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>CS Elective</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Year One Total                 .45

Grand Total                    .45

EPC: S01C

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

** Students may select from the following for the Computer Science elective credits:
- CS 121, CS 131, CS 140, CS 141, CS 142, CS 229, CS 230 or CS 240.

*** Students may select from the following for the Computer Science elective credits:
- CS 121, CS 131, CS 140, CS 141, CS 142, CS 229, CS 230 or CS 240.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (W) - BUS 137, ENGL& 101
- (M) - BUS 112, MATH 078E
- (R) - BUS 102, PSYC & 100
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (W) - Written Communications
- (L) - Leadership
- (O) - Oral Communications
- (R) - Human Relations

Networking Certificate
This certificate provides students with a working knowledge of computer networks, including network hardware and popular network operating systems.

Degree available at/via: [Walla Walla] [Clarkston] [Online (partial)]

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.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>CS 115, Introduction to Computer &amp; Information Technology</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>CS 120, Networking Using Internet Technologies</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 121, Problem Solving with Programming *</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>CS 125, Operating Systems</td>
<td></td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 130, PC Support and Maintenance I</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>. . .</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

Year One Total                 .50

Grand Total                    .50

EPC: S27C

* Students may elect to substitute CS 131, CS 140, CS 142 or CS 230. Please note the course for substitution may only be used once in the degree sequence.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (J) - CS 192
- (W) - BUS 137, ENGL& 101
- (L) - CS 292
- (M) - BUS 112, MATH 078E
- (O) - CMST 102, CMST & 220
- (R) - BUS 102, PSYC & 100
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (W) - Written Communications
- (L) - Leadership
- (O) - Oral Communications
- (R) - Human Relations

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
The Cosmetology program provides opportunities for individuals who enjoy working with people. It is a time-honored yet changing career with excellent management opportunities. Cosmetology can be a rewarding career for the individual who is hardworking, creative and who enjoys working with people.

### Degree Outcomes:

- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge of software and hardware related to entry-level digital design applications.
- Demonstrate the ability to work effectively in a team setting.
- 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 knowledge and application of customer service skills.
- Involve cosmetology professionals in curriculum development and learning outcomes.
- Certify the program using industry skill standards.
- To market, recruit, and retain students in the Cosmetology program.
- Provide instruction with current skills (techniques and styles) used in the cosmetology profession in order to prepare students for employment.

### 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.

### Program Levels

#### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>CS 223, Computer Layout and Design (Photoshop)</td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 226, Web Design Specialist I</td>
<td>.5</td>
</tr>
<tr>
<td>CS 227, Web Design Specialist</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 228, Website Design and Construction II</td>
<td>.5</td>
</tr>
<tr>
<td>CS 250, Site Development Associate</td>
<td>.5</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
<tr>
<td>Year One Total</td>
<td>45</td>
</tr>
<tr>
<td>Grand Total</td>
<td>45</td>
</tr>
</tbody>
</table>

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 222 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 127, ENGL& 101

(M) - BUS 112, MATH 078E

(J) - Job Seeking Skills

(M) - Computation/Mathematics

(W) - Written Communications

(R) - Human Relations

(O) - Oral Communications

(L) - Leadership

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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 WWCCs 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.wtb.wa.gov/etp.

Degrees

Associate in Applied Arts and Sciences
Degree in Cosmetology

This technical degree prepares the student for employment in all areas of the cosmetology industry.

Degree available at/via: [Walla Walla]

Degree Outcomes:
- Apply cosmetology theory and technical skills, at entry level standards in a professional manner.
- Demonstrate trouble shooting and problem solving in various cosmetology work-related situations.
- Apply effective listening and speaking skills to educate cosmetology clients on individual beauty requirements.
- Show professionalism and sensitivity towards others.
- Practice safe and sanitary procedures in compliance with state regulations.
- Demonstrate efficient time management skills when working in cosmetology salons.
- Demonstrate marketing strategies to cosmetology customers.

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

Other Information: COSM 281, Cadet Instructor Training is available quarterly. Contact the Cosmetology faculty for additional details.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 111, Principles and Procedures of Cosmetology I</td>
<td>.11</td>
</tr>
<tr>
<td>COSM 112, Practical Application I</td>
<td>.11</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>.3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 121, Principles and Procedures of Cosmetology II</td>
<td>.11</td>
</tr>
<tr>
<td>COSM 122, Practical Application II</td>
<td>.11</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>.4 - .7</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>.3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.25.8-26.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 131, Intermediate Principles and Procedures I</td>
<td>.11</td>
</tr>
<tr>
<td>COSM 132, Practical Application III</td>
<td>.11</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>.3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 299, Leadership (L)</td>
<td>.1</td>
</tr>
<tr>
<td>COSM 270, Practical Application VI</td>
<td>.11</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.12</td>
</tr>
</tbody>
</table>

Year One Total      | .879-88.1|

YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>COSM 241, Intermediate Principles and Procedures II</td>
<td>.11</td>
</tr>
<tr>
<td>COSM 242, Practical Application IV</td>
<td>.11</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 251, Advanced Principles and Procedures I</td>
<td>.11</td>
</tr>
<tr>
<td>COSM 252, Practical Application V</td>
<td>.11</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>.3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.25</td>
</tr>
</tbody>
</table>

Year Two Total       | .52     |

Grand Total          | .139.8-140.1|

EPC: 823
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 097, ENGL& 101, WRITE 100
- (L) - COSM 299
- (M) - BUS 112
- (O) - CMST 102, CMST& 220, OCSUP 102
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC& 100
- (J) - Job Seeking Skills
- (L) - Leadership
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations
Criminal Justice
http://www.wwcc.edu/criminal justice

Susan Palmer 509.527.4545 susan.palmer@wwcc.edu
Jim Peitersen 509.527.4601 james.peitersen@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

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.

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.wtb.wa.gov/etp.

Culinary Arts
http://www.wwcc.edu/culinary arts

Dan Thiessen 509.524.4800 dan.thiessen@wwcc.edu
Jay Entrikin 509.524.5164 jay.entrikin@wwcc.edu
Gregory Schnorr 509.524.5150 gregory.schnorr@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.wtb.wa.gov/etp.

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

103
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 foodservice 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</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>CA 110, ServSafe</td>
<td>3</td>
</tr>
<tr>
<td>CA 111, Storeroom Operations</td>
<td>3</td>
</tr>
<tr>
<td>CA 112, Introduction to the Culinary Arts</td>
<td>10</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21.4</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 120, Culinary Arts Methods</td>
<td>9</td>
</tr>
<tr>
<td>CA 121, American Regional Cuisine</td>
<td>4</td>
</tr>
<tr>
<td>CA 122, Food, Farmers and Culture</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

YEAR TWO

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 240, French and Mediterranean Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 241, Asian Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 242, Nutritional Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 243, Food and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 250, Garde Manger</td>
<td>9</td>
</tr>
<tr>
<td>CA 251, Latin American Cooking</td>
<td>2</td>
</tr>
<tr>
<td>CA 252, Culinary Trends and Concepts</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 260, Menu Development</td>
<td>3</td>
</tr>
<tr>
<td>CA 261, A la Carte Cooking</td>
<td>8</td>
</tr>
<tr>
<td>CA 262, Service Management</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Quarter Four

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 192, Cooperative Seminar I (R)</td>
<td>2</td>
</tr>
<tr>
<td>CA 292, Cooperative Seminar II (L)</td>
<td>2</td>
</tr>
<tr>
<td>CA 191, Cooperative Work Experience I*</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** 62

**Grand Total** 126.4

EPC: 850

* Students are required to complete 15 credits/450 hours of cooperative work experience. Can be acquired while employed within the industry, or accrued hours of event support for on-premise events. Students may take more credits if approved by the instructor.

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

- (J) - OCSUP 103, PSYC 140
- (W) - BUS 137, ENGL 097, ENGL 101, WRITE 100
- (L) - CA 292, OCSUP 299
- (M) - BUS 112, MATH 072H, OCSUP 106
- (O) - CMST 102, CMST 220, OCSUP 102
- (R) - BUS 157, CA 192, OCSUP 101, PSYC 100
- (J) - Job Seeking Skills
- (L) - Leadership
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations

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

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

AAAS, CERT
http://wwcc.edu/dieselequipment

David Bailey 509.529.2600 david.bailey@wwcc.edu
Richard Hellig 509.524.5200 richard.hellig@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Diesel Technology provides a hands-on, work-based training experience and the classroom curriculum required for careers in diagnosing and repairing heavy-duty trucks, heavy equipment, medium-duty vehicles, agricultural equipment, logging equipment, forklifts, and mining equipment. Diesel Technology integrates the many components necessary to prepare students with the technical knowledge and mechanical skills required to service, repair, and test various types of machinery. An extensive curriculum prepares students to apply knowledge and skills to a wide range of diesel powered equipment applications. Diesel Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Understand the construction, function, and general service of all major equipment components.
- Diagnose mechanical malfunctions and performance problems.
- Make decisions as to disposition of worn parts (i.e. usable as is; should be reconditioned or replaced).
- Operate precision diagnostic and repair equipment.
- Read and interpret repair manuals.
- Understand the importance of good public relations with customers, employer, and fellow employees.
- Understand basic shop operation.
- Be cognizant of overhead and labor cost in relationship to profit.
- Understand apprenticeship and how it functions.
- Be informed on methods of seeking employment.

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

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.wtb.wa.gov/etp.

Degrees

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: Troubleshoot 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.

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

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Diesel Technology Certificate

Degree Outcomes:

- Demonstrate basic shop fundamentals and safety.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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, Intro. to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 162, Machinery Repair I</td>
<td>10</td>
</tr>
<tr>
<td>DT 180, Suspension and Alignment</td>
<td>5</td>
</tr>
<tr>
<td>DT 185, Drive Trains</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | **79**

YEAR TWO

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 163, Machinery Repair II</td>
<td>8</td>
</tr>
<tr>
<td>DT 187, Heating and Air Conditioning</td>
<td>5</td>
</tr>
<tr>
<td>DT 183, Electronics I</td>
<td>5</td>
</tr>
<tr>
<td>DT 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td>DT 189, Preventive Maintenance</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 267, Advanced Equipment Repair II</td>
<td>10</td>
</tr>
<tr>
<td>DT 283, Electronics II</td>
<td>5</td>
</tr>
<tr>
<td>DT 281, Engines Advanced</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td>DT 191, Cooperative Work Experience**</td>
<td>12 - 15</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14-17</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** | **60-63**

**Grand Total** | **139-142**

EPC: 775
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
- (M) - BUS 112, OCSUP 106
- (O) - CMST 102, CMST& 220, OCSUP 102
- (R) - DT 299
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications

* Any welding course 141 or above 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
- (L) - DT 299
- (M) - BUS 112, OCSUP 106
- (O) - Oral Communications
- (W) - Written Communications

WELD 141, Welding Basics | 4
WRITE 100, Writing in the Workplace (W) | 3
**Total Credits** | **27**

EPC: 775C

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

**Department Overview:** The Theatre Arts department offers a wide range of theatre courses and production opportunities. Through the study of the theatrical arts (acting, directing, stagecraft, design, and playwriting) students experience the power and value of theatre as a form of cultural development, societal reflection, and communication. Theatrical experience helps students gain a deeper understanding of themselves and human behavior by developing creative and critical thinking skills in a teamwork environment.

**Program Level Outcomes:**

- An aesthetic and intellectual comprehension of culturally and linguistically diverse works in literature, philosophy, visual and performing arts, including film and music.
- An understanding and working knowledge of terminology commonly used in the humanities.
- An appropriate level of creativity, discipline, and technique in the production of assigned work in the humanities.

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

**Preparation for Success:** Most people studying for a bachelor’s degree in Theatre Arts take courses in radio and television broadcasting, communications, film, theater, and dramatic literature. Many continue their academic training and earn a
Early Childhood Education prepares
Program Level Outcomes:

Program curriculum is reviewed by an advisory board.

Education courses are generally offered in late afternoon or

evenings to accommodate currently employed students. Early Childhood

specific courses towards continuing education credits. In an effort

in cooperative work experiences. Certified teachers may apply

apply newly acquired skills and knowledge through participation

opportunities for the ongoing professional development of


quality learning and play in early care and educational settings.


caregivers is also included. Students have the opportunity to

immediately contribute to the development and growth of a

child. The Early Childhood Education curriculum promotes high

quality learning and play in early care and educational settings.

Opportunities for the ongoing professional development of
caregivers is also included. Students have the opportunity to

apply newly acquired skills and knowledge through participation in

cooperative work experiences. Certified teachers may apply

specific courses towards continuing education credits. In an effort to

accommodate currently employed students, Early Childhood

Education courses are generally offered in late afternoon or

evenings. Program curriculum is reviewed by an advisory board composed of local and regional early learning professionals.

Program Level Outcomes:

• Provide students with the highest level of instruction in the knowledge and skills required in the field of early childhood education.

• Attract, retain and graduate competent students into the early childhood education profession.

• Keep programs current with industry standards by involving community stakeholders in curriculum development and verification of student outcomes.

• Articulate the Early Childhood Education program with regional high schools and universities.

• Educate and graduate students who possess the knowledge and skills required to succeed in early childhood careers or studies at the university level.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Early Childhood Education upon completion of the two-year program of study. This degree allows graduates to enter the workforce. A certificate in Early Childhood Education is available upon completion of one year of the program.

An Associate in Applied Science-Transfer (AAS-T) degree in Early Childhood Education is also offered for students planning to transfer to a four-year college or university.

Students may earn an Associate of Arts in Elementary Education (DTA) upon completion of a two-year program. This degree transfers to four-year university programs in Elementary Education. This degree also allows students to work as education paraprofessionals in the K-12 school system.

Industry Description: As the number of parents working outside the home increases, the need for quality childcare continues to grow both locally and nationally. Education and training has been identified as one of the key factors to decrease the current rate of staff turnover in childcare settings. Early childhood educators work with children from birth to age eight in childcare and early learning settings.

Paraprofessionals are assistants in classroom settings who provide instructional support for pre-K-12 classroom teachers. By providing students with individualized instruction, teacher assistants tutor and assist children in learning course materials. Teacher assistants also supervise students in the cafeteria and playground. They record grades, set up equipment, and help prepare materials for instruction. Teacher assistants are also called teacher aides, instructional aides, paraeducators or paraprofessionals. The federal legislation No Child Left Behind requires newly hired paraprofessionals to complete two years of college, obtain an Associate Degree, or to pass a rigorous test.

Certified teachers in the K-12 school system are required to hold a bachelor's degree, complete a state-approved teacher preparation program at a regionally accredited college/university, and pass a basic skills test and a test for each endorsement. A teacher is responsible for implementing required curriculum in the classroom, assessing student progress, managing classroom discipline, communicating with parents, working cooperatively with other professionals and adhering to all school district policies.

Entrance Requirements: Students may begin their study in

the ECE programs in any quarter. 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.wtb.wa.gov/etp.

### Certificates

**State Initial Early Childhood Education Certificate**

The Early Childhood Education Initial Certificate is a State-wide credential for early care and education professionals.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

_EPC: 40E_

**State Short Early Childhood Education Certificate of Specialization-General**

This short certificate of specialization is part of a Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 136, School Age Care</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
</tr>
<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: 43E_

**State Short Early Childhood Education Certificate of Specialization-Family Child Care**

This short certificate of specialization is part of a Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>EDUC&amp; 134, Family Child Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
</tr>
<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: 44E_

**State Short Early Childhood Education Certificate of Specialization-Infants and Toddlers**

This short certificate of specialization is part of a Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

_EPC: 41E_

**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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
</tr>
<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: 42E_

**State Short Early Childhood Education Certificate of Specialization-Administration**

This short certificate of specialization is part of a Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>EDUC&amp; 134, Family Child Care</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
</tr>
<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: 45E_

For the most current information see: www.wwcc.edu
### State Early Childhood Education Certificate

This one-year certificate is part of a Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

**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.

### Degrees

**Associate in Applied Arts and Sciences Degree in Early Childhood Education**

This technical degree prepares the student for immediate careers as early childhood educators, paraeducators, preschool teachers, and child care professionals. It can be utilized by individuals planning to enter their chosen career upon graduation or for the individual who is interested in improving current skills and knowledge.

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

**Degree Outcomes:**
- Demonstrate competency in assisting the teacher in caring for children in early learning settings to include supporting cognitive, physical and social-emotional development of the child.
- Plan and implement developmentally appropriate curriculum in the early learning setting.
- Demonstrate appropriate professional and ethical behavior in early childhood settings.
- Demonstrate knowledge of strategies to promote, facilitate and extend learning for all children.
- Explain and apply child development principles.
- Demonstrate ability to communicate effectively with adults and children.

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

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 139, Admin Early Lrng Prog</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
</tr>
<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: 45E**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (W) - ENGL& 101, ENGL& 102
- (M) - MATH 205, MATH 206, MATH& 107

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</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>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</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>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>47</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>

**EPC: 402C**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (W) - ENGL 100, 101, or above (W)
- (M) - Computation/Mathematics
- (J) - Job Seeking Skills
- (L) - Leadership
- (O) - Oral Communications
- (R) - Human Relations

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Nutrition/Safety</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 100, 101, or above (W)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</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 100, or above (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</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>
<td>3</td>
</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, Job Psychology (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>
## Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCSUP 102, Oral Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 150, Math &amp; 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>3</td>
</tr>
<tr>
<td>ECED&amp; 139, Admin Early Lrng 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</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>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 II</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>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>40</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

EPC: 402

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

(J) - OCSUP 103, PSTC 140
(W) - ENGL 101, ENGL 102
(L) - ECED 139
(M) - MATH 205, MATH 206, MATH 107
(O) - CMST 102, CMST 220, OCSUP 102
(R) - OCSUP 101, PSYC 111, PSYC 100
(J) - Job Seeking Skills
(M) - Computation/Mathematics
(W) - Written Communications

### AAS-T in Early Childhood Education

This is a dual-purpose degree that is intended to prepare students for employment in Early Childhood Education programs such as Head Start, childcare or preschool settings, and for transfer to specific baccalaureate degree programs. These include: Evergreen State College, University of Phoenix (BSM), Seattle Pacific University (Professional Studies Degree), and 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 GPA's and course grades are often required.

### Communication Skills

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 or ENGL 104</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>5</td>
</tr>
<tr>
<td>CMST 220</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Quantitative Skills

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 107 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 115 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 141 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 148 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 201 or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 206</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Humanities

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART, ASL, DRMA, ENGL LIT only, FREN, MUSC, or SPAN [H] [HP]</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Social Sciences

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 100</td>
<td>5</td>
</tr>
<tr>
<td>ANTH 206 or</td>
<td>5</td>
</tr>
<tr>
<td>SOC 101</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Natural Sciences

Course selection must be a lab science from the Natural Science distribution requirements for the AA degree

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

### Required Courses:

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>ECED&amp; 160, Curriculum Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 203, Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

### 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).
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 off-campus locations. Curriculum is research-based and developed and maintained with input from the Early Childhood Education advisory board composed of local and regional educators and parents.

For Estimated Program Cost, view the Paying for College page and click on Cost.

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

Economics

http://wwcc.edu/economics
Debora Frazier  509.527.4689  debbie.frazier@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

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:

- 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] [Online (partial)]

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.

Associate in Elementary Education - DTA/MRP

This degree is applicable to students planning to prepare for an upper division elementary education major. Students must earn a “C” or above in all courses required for this degree. Please note that minimum grade point averages are established by each institution and higher GPA’s are often required. It is strongly recommended that students contact the baccalaureate granting education school early in their Associate in Elementary Education - DTA program to be advised about additional requirements (e.g., GPA) and procedures for admission. Students must take the WEST-B in order to apply to teacher preparation programs in Washington State. Please refer to the degrees section of this catalog for degree requirements.

Degree available at/via: [Walla Walla]

EPC: ELEM

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

Associate in Math Education - DTA/MRP
This degree is for students planning to major in secondary math education at a baccalaureate institution. It is a statewide transfer agreement for secondary math education majors between the community colleges and public baccalaureate institutions in the state of Washington.

This Direct Transfer Agreement (DTA) will fulfill the general education requirements at the public Washington State baccalaureate institutions.

Students must earn a cumulative grade point average of at least a 2.0. Please note that higher GPAs are often required for admission to math education programs. It is strongly recommended that students contact the baccalaureate granting education school early in their Associate in Math Education - DTA program to be advised about additional requirements and procedures for admission. Students must take the WEST in order to apply to teacher preparation programs in Washington State. Please refer to the Degrees section of this catalog for degree requirements.

Energy Systems Technology - Electrical

AAAS, CERT
http://www wwcc edu/electrical

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, 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.

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

For the most current information see: www wwcc edu
phase transformers, DC generators and motors, three-phase alternators, 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 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>WRITE 100, Writing in the Workplace (W)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>.3</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>.3</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)*</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

#### 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, Motors and Motors Maintenance</td>
<td>.6</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>.3</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

#### Quarter Four

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 191, Cooperative Work Experience</td>
<td>.4</td>
</tr>
<tr>
<td>EST 292, Cooperative Seminar II (L)</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

### Year One Total

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 292, Cooperative Seminar II (L)</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>69</strong></td>
</tr>
</tbody>
</table>

### Year Two

#### Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 112, Blue Print Reading</td>
<td>.2</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>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>
<td>.2</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

#### Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRK 101, CDL Training**</td>
<td>.12</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.12</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>.40</strong></td>
</tr>
</tbody>
</table>

### Grand Total

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRK 101, CDL Training</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>.12</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>.40</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>109</strong></td>
</tr>
</tbody>
</table>

**EPC: 784**

* Students are required to complete either OCSUP 107, Intro to Technical Math or MATH& 142, Precalculus II. Students scoring below 54 on the Compass Mathematics Exam will enroll in OCSUP 106 fall quarter.

** EST 144, Industrial Safety will include OSHA 1026 Training and Medic First Aid Training.

*** TRK 101, CDL Training is optional for the degree.

**** EST 191, Cooperative Work Experience and EST 192, Cooperative Seminar are available after the second quarter and can be completed during summer quarter of the first year or during the second year.

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

(J) - OCSUP 103, PSYC 140
(W) - ENGL 097, ENGL& 101, WRITE 100
(L) - EST 292
(M) - MATH& 142, OCSUP 107
(O) - CMST 102, CMST& 220, OCSUP 102
(R) - OCSUP 101, PSYC 111, PSYC& 100

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

### Certificates

**Energy Systems Technology - Electrical Certificate**

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-reactance circuits, single and three-phase transformers, DC generators and motors, Three-Phase Alternators, Single and three-phase Motors.
- Ability to read schematics, wire and test various types of electrical circuits.
- Demonstrate or describe proper safety procedures for working with rotating machinery, moving heavy objects, pressurized vessels and systems, chemicals, ladders and energy; electrical, heat, cold, fluid.
- Explain solid state components and devices.
<table>
<thead>
<tr>
<th>Quarter One</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>WRITE 100, Writing in the Workplace (W)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>.3</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)*</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>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, Motors and Motors Maintenance</td>
<td>.6</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>.3</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>55</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

EPC: 784C

* Students are required to complete OCSUP 107, Introduction to Technical Math or MATH& 142, Precalculus II. Students scoring below 54 on the Compass Mathematics Exam will enroll in OCSUP 106 fall quarter.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (J) - OCSUP 103, PSYC 140
- (W) - ENGL 097, ENGL& 101, WRITE 100
- (M) - MATH& 142, OCSUP 107
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (L) - Leadership
- (R) - Human Relations

### Energy Systems Technology - HVACR

AAAS, CERT

http://wwcc.edu/energy

Michael Houdak 509.527.4252 michael.houdak@wwcc.edu

Program available at/via: [Walla Walla]

**Department Overview:** The WWCC Energy Systems Heating, Ventilation, Air Conditioning, and Refrigeration is a nationally accredited program that provides the students with an entry level understanding of construction workplace safety, basic DC & AC electrical theory, basics of physics and refrigeration theory, tools, mechanical components, environmental green technology, AC electrical application, controls, electrical motors and maintenance, programmable logic controls, direct digital controls, electronics, national electrical code and mechanical code, heating systems, commercial and industrial refrigeration for the residential, commercial, and industrial applications. Courses are offered in lecture, demonstration, lab, internship and web enhanced formats.

**Program Level Outcomes:**

- Provide students with marketable technical and interpersonal skills in the trade, resulting in career placement.
- Provide relevant training through hands-on and field experience to prepare the students for industry.
- Develop students’ analytical thinking and problem-solving abilities through instructional labs, projects, and testing.
- Provide training in environmental and workplace safety that meets appropriate industry standards.

**Degrees:** Students may earn an Associate in Applied Arts and Sciences Degree in the following area: Refrigeration and Air Conditioning. One-year certificate is also available for the above listed AAAS degree.

**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 HVACRE training course should apply online, complete financial aid and placement testing offered by Walla Walla Community College, and meet with a program advisor in the HVACRE training area. A high school diploma or GED® is recommended for entry into this program and is required if students pursue an AAAS degree. Students entering the program are required to obtain Washington State LNI Electrical trainee card the first quarter of enrollment (this may be waived if out of state). Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall.

It is recommended that the student contact the lead instructor regarding appropriate program placement and paying a priority list fee to hold placement in the program.

**Other Information:** Technicians for the HVACRE Industry should:

- Have a valid driver’s license.
- Have an acceptable driving record, this typically will be
The AAAS Degree is designed for students 14-20 years of age who are interested in improving current skills and knowledge. 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.

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

### Degrees

**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 electric 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, troubleshooting 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>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 100, Refrigeration and Air Conditioning Basics I</td>
<td>5</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>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 101, Refrigeration and Air Conditioning Basics II</td>
<td>5</td>
</tr>
<tr>
<td>EST 110, Refrigeration and Air Conditioning Mechanical Equipment</td>
<td>6</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 120, Air Conditioning Systems</td>
<td>6</td>
</tr>
<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>EST 150, Motors and Motors Maintenance</td>
<td>6</td>
</tr>
<tr>
<td>EST 200, Ductwork Design and Fabrication</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 191, Cooperative Work Experience</td>
<td>10</td>
</tr>
<tr>
<td>EST 192, Cooperative Seminar (R)*</td>
<td>2</td>
</tr>
<tr>
<td>EST 292, Cooperative Seminar II (L)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td>72</td>
</tr>
</tbody>
</table>

#### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 112, Blue Print Reading</td>
<td>2</td>
</tr>
<tr>
<td>ELECT COM4, Oral Communications (O)</td>
<td>3-5</td>
</tr>
<tr>
<td>EST 240, Intro to Basic Electronics</td>
<td>5</td>
</tr>
<tr>
<td>EST 264, Heating Systems and Heat Pumps</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18-20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 220, Ammonia Refrigeration Systems</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>
<td>2</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

For the most current information see: www.wwcc.edu
ENERGY SYSTEMS TECHNOLOGY - HVACR

Quarter Three  Credits
EST 165, Rigging, Equipment Operation & Material Handling .................................................. 5
EST 265, Commercial Refrigeration Equipment ................................................................. 8
Total Credits .................................................. 13
Year Two Total ........................................... 47-49
Grand Total .............................................. 119-121

EPC: 703
* EST 191 and EST 192 are available after the second quarter and can be completed during summer quarter of the first year or during the second year.
** EST 144, Industrial Safety will include OSHA 1026 Training and MedicFirst Aid Training.
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(J) - OCSUP 103, PSYC 140
(W) - ENGL& 101, WRITE 100
(L) - EST 292
(M) - MATH 074C, OCSUP 106
(O) - CMST 102, CMST& 220, ELECT COM4, OCSUP 102
(R) - EST 192
(J) - Job Seeking Skills  (L) - Leadership
(M) - Computation/Mathematics  (O) - Oral Communications
(W) - Written Communications  (R) - Human Relations

Certificates

Energy Systems Technology - HVACR Certificate
This certificate is equivalent to the first year of the AAAS Degree in Energy Systems Technology - Refrigeration and Air Conditioning.

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 electric 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.

YEAR ONE

Quarter One  Credits
EST 100, Refrigeration and Air Conditioning Basics I .............................................................. 5
EST 131, Principles of Electricity Theory .............................................................................. 5
EST 144, Industrial Safety in the Workplace ** ................................................................. 3
OCSUP 106, Applied Mathematics I (M) ............................................................... 5
Total Credits .................................................. 18

Quarter Two  Credits
EST 101, Refrigeration and Air Conditioning Basics II ...................................................... 5
EST 110, Refrigeration and Air Conditioning Mechanical Equipment .............................................. 6
EST 132, Principles of Electricity AC Application .......................................................... 5
WRITE 100, Writing in the Workplace (W) ........................................................................ 3
Total Credits .................................................. 19

Quarter Three  Credits
EST 120, Air Conditioning Systems .................................................................................. 6
EST 133, Introduction to Controls ................................................................................ 5
EST 150, Motors and Motors Maintenance ..................................................................... 6
EST 200, Ductwork Design and Fabrication ..................................................................... 4
Total Credits .................................................. 21

Quarter Four  Credits
EST 191, Cooperative Work Experience ......................................................................... 10
EST 192, Cooperative Seminar (R)* ............................................................................. 2
EST 292, Cooperative Seminar II (L) .............................................................................. 2
Total Credits .................................................. 14
Year One Total ............................................. 72
Grand Total ................................................. 72

EPC: 703C
* EST 191 and EST 192 are available after the second quarter and can be completed during summer quarter of the first year or during the second year.
** EST 144, Industrial Safety will include OSHA 1026 Training and MedicFirst Aid Training.
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(J) - OCSUP 103, PSYC 140
(W) - ENGL& 101, WRITE 100
(L) - EST 292
(M) - MATH 072B, OCSUP 106
(O) - CMST 102, CMST& 220, ELECT COM4, OCSUP 102
(R) - EST 192
(J) - Job Seeking Skills  (L) - Leadership
(M) - Computation/Mathematics  (O) - Oral Communications
(W) - Written Communications  (R) - Human Relations

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

AAAS, CERT
http://www.wwcc.edu/wind

James Bradshaw 509.524.5186  james.bradshaw@hotmail.com

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:

- Ensure a safe work environment and meet safety standards.
- Demonstrate a strong foundation in Electrical, Mechanical, and Hydraulic Systems.
- 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.

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.

Entrance Requirements:

Students are admitted into the program based on the completion of the below criteria. The evaluation of each student will be made by the Admission/Progression Committee.

- Prior academic success.
- Application, resume, and essay.
- Completion of placement tests offered by WWCCs Student Development Center.
- English: eligible to enter ENGL 077 or WRITE 100.
- Math: eligible to enter OCSUP 106.
- Successful completion of EST 103, CS 110, WRITE 100, and OCSUP 106/MATH 074C or appropriate placement into OCSUP 107.
- Successfully demonstrating the ability to climb a 300 foot ladder.
- Successfully passing the mechanical aptitude test.
- Successfully passing driving background check.

Preparation for Success: By completing the following courses prior to entering the Wind Energy Technology program, student will be well prepared for courses within the degree.

- OCSUP 106, 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.
- 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.
Degrees

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.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>CS 110, Introduction to Computers and Applications</td>
</tr>
<tr>
<td></td>
<td>EST 103, Introduction to Wind Energy</td>
</tr>
<tr>
<td></td>
<td>OCSUP 103, Job Seeking Skills (J)</td>
</tr>
<tr>
<td></td>
<td>WRITE 100, Applied Writing (W)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 115, Industrial Mechanics/Maintenance - Wind Machines</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)**</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
</tr>
<tr>
<td>EST 150, Electrical Motors and Controls</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
</tr>
<tr>
<td>EST 165, Crane Rigging, and Material Handling</td>
</tr>
<tr>
<td>EST 175, Tower Rescue and Climbing Competency</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
<tr>
<td>Year One Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>CS 110, Introduction to Computers and Applications</td>
</tr>
<tr>
<td></td>
<td>EST 103, Introduction to Wind Energy</td>
</tr>
<tr>
<td></td>
<td>OCSUP 103, Job Seeking Skills (J)</td>
</tr>
<tr>
<td></td>
<td>WRITE 100, Applied Writing (W)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 115, Industrial Mechanics/Maintenance - Wind Machines</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace **</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)*</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
</tr>
<tr>
<td>EST 150, Electrical Motors and Controls</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
</tr>
<tr>
<td>EST 165, Crane Rigging and Material Handling</td>
</tr>
<tr>
<td>EST 175, Tower Rescue and Climbing Competency</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
<tr>
<td>Year One Total</td>
</tr>
<tr>
<td>Grand Total</td>
</tr>
</tbody>
</table>

EPC: 177D

* Students are required to complete OCSUP 107, Introduction to Technical Math. Based on placement test scores, students may have to enroll in OCSUP 106 fall quarter, but it is not required for students who test above OCSUP 106. Students may take MATH 050 in place of OCSUP 106.

** EST 144 and EST 192 are available during summer quarter of the first year or spring quarter second year. This will require an agreement with local Wind Turbine Owners/Operators.

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

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(J) - OCSUP 103, PSYC 140</td>
</tr>
<tr>
<td>(W) - ENGL 101, WRITE 100</td>
</tr>
<tr>
<td>(L) - EST 292</td>
</tr>
<tr>
<td>(M) - OCSUP 107</td>
</tr>
<tr>
<td>(O) - CMST 102, CMST &amp; 220, OCSUP 102</td>
</tr>
<tr>
<td>(R) - OCSUP 101, PSYC 111, PSYC &amp; 100</td>
</tr>
</tbody>
</table>

Certificates

Wind Energy Technology Certificate

The Wind Energy Technology Certificate is equivalent to the first three quarters of the AAAS degree.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>CS 110, Introduction to Computers and Applications</td>
</tr>
<tr>
<td></td>
<td>EST 103, Introduction to Wind Energy</td>
</tr>
<tr>
<td></td>
<td>OCSUP 103, Job Seeking Skills (J)</td>
</tr>
<tr>
<td></td>
<td>WRITE 100, Applied Writing (W)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Two

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 115, Industrial Mechanics/Maintenance - Wind Machines</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace **</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)*</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
</tr>
<tr>
<td>EST 150, Electrical Motors and Controls</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
</tr>
<tr>
<td>EST 165, Crane Rigging and Material Handling</td>
</tr>
<tr>
<td>EST 175, Tower Rescue and Climbing Competency</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
<tr>
<td>Year One Total</td>
</tr>
<tr>
<td>Grand Total</td>
</tr>
</tbody>
</table>

EPC: 177W

*EST 144, Industrial Safety includes Medic First Aid Training and OSHA 1926 Training.

** Students are required to complete OCSUP 107, Intro to Technical Math. Based on placement test scores, students may have to enroll in OCSUP 106 fall quarter, but it is not required for students who test above OCSUP 106. Students may take MATH 050 in place of OCSUP 106.

*** EST 191 and EST 192 are available during summer quarter of the first year or spring quarter second year. This will require an agreement with local Wind Turbine Owners/Operators.

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

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(J) - OCSUP 103, PSYC 140</td>
</tr>
<tr>
<td>(W) - ENGL 101, WRITE 100</td>
</tr>
<tr>
<td>(L) - EST 292</td>
</tr>
<tr>
<td>(M) - OCSUP 107</td>
</tr>
<tr>
<td>(O) - CMST 102, CMST &amp; 220, OCSUP 102</td>
</tr>
<tr>
<td>(R) - OCSUP 101, PSYC 111, PSYC &amp; 100</td>
</tr>
</tbody>
</table>

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

AAAS, AS, CERT
http://www.wwcc.edu/engineering
Ron Rooks, P.E. 509.527.3655 ron.rooks@wwcc.edu
Program available at/via: [Walla Walla]

Department Overview: The Engineering Program educates students in the design, development, and construction monitoring of facilities such as roadway, water supply, and control systems that affect every aspect of daily life. Students gain a sound knowledge of the fundamental principles and related issues of engineering through several one-year certificate and two-year degree options. One may enter the workforce as a technician or continue their education at an ABET-accredited institution depending upon the degree completed. In addition, several courses are offered on a continuing education basis to meet individual needs. Current technical coursework is based largely upon civil engineering and includes hands-on training. The engineering curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

• Provide a sound knowledge of the fundamental principles of engineering so that they may either enter the work force or continue their education in engineering.
• Develop critical thinking and problem solving skills that can be applied to a wide range of problems, both technical and non-technical.
• Provide the skills necessary for the practice of engineering technology.
• Provide a well-balanced educational experience that will foster 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 Applied Arts and Sciences Degree in Engineering Technology. One-year certificate options include Engineering Graphics and Surveying. These options allow students the freedom to pursue careers after either one or two years of training.

Students may also earn an Associate in Science Degree-Option II (Engineering) which is designed to prepare students to continue their education at an ABET-accredited institution. Please consult with an adviser at WWCC and one’s intended transfer institution to determine an appropriate education plan.

Industry Description: Engineering is the field of expertise that designs, develops, and monitors construction of facilities such as roadway, water supply, and control systems that affect all aspects of daily life. It encompasses many specialties, including civil, structural, water resource, environmental, construction, transportation, geotechnical, industrial, mechanical, electrical, chemical, and agricultural engineering. Engineers complete site investigations, complete planning studies and reports, perform computations, meet with agencies, clients, and the public, develop construction documents, and monitor construction related to the development of such facilities. Engineering technicians assist engineers by performing such tasks as research, quality control, set up and monitoring of instruments, estimation of construction costs, computations, layout designs, specification of construction materials, and preparation of drawings and specifications. Technicians associated with civil engineering may assist engineers on highways, buildings, bridges, dams, wastewater treatment, potable water, and irrigation systems, and related structures and perform duties such as geotechnical investigations, construction inspection, traffic studies, and land-surveying. Those associated with mechanical engineering or similar may assist engineers with product development, fabrication, manufactured or production systems, and related operations. Due to an aging infrastructure and engineering involvement in relatively all aspects of daily life, the demand for engineers and engineering technicians is growing. Cities, counties, state and federal agencies, special districts, private consultants, manufacturing operations, and production plants hire engineers, technicians, and technologists.

Entrance Requirements: Students may begin their study in fall, winter, or spring quarters. However, not all courses are offered all quarters and that 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.wtb.wa.gov/etp.

Degrees

Associate in Applied Arts and Sciences Degree in Engineering Technology

This technical degree prepares the student for immediate employment in the engineering technology industry. It may be utilized by individuals who are interested in improving current skills and knowledge.

Degree available at/via: [Walla Walla]

Degree Outcomes:

• Apply knowledge of mathematics, sciences, and other related disciplines (TAC/ABET outcome).
• Conduct experiments, as well as analyze and interpret data (TAC/ABET outcome).
• Identify, formulate, and solve applied science problems (TAC/ABET outcome).
• Demonstrate an ability to function on teams (TAC/ABET outcome).
• Explain professional and ethical responsibility (TAC/ABET outcome).
• Demonstrate an ability to communicate effectively (TAC/ABET outcome).
• Recognize the need for and engage in life-long learning (TAC/ABET outcome).
• Identify contemporary issues (TAC/ABET outcome).
• Use the techniques, skills, and modern applied science tools necessary for professional practice (TAC/ABET outcome).
• Demonstrate a commitment to quality, timeliness and continuous improvement.
• Conduct standardized field and laboratory testing on engineering materials.
• Determine forces and stresses in elementary structural systems.
• Utilize graphic techniques and CAD software to produce engineering documents.
• Utilize modern surveying methods for land measurement and/or construction layout.
• Estimate material quantities for technical projects.
• Utilize productivity software to solve technical problems.

Transferability: Since the Associate in Applied Arts and Sciences (AAAS) is designed for students to enter their chosen career upon graduation, often only selected course within the degree are considered transferable to baccalaureate institutions. The transferability of courses must be confirmed with one's intended transfer institution.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 104, Intro to Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>4</td>
</tr>
<tr>
<td>ENT 292, Leadership (L)</td>
<td>2</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td></td>
</tr>
<tr>
<td>ENT 121, Computer Aided Drafting and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENT 131, Construction Materials</td>
<td>4</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>ENT 122, Advanced Computer Aided Design ***</td>
<td>3</td>
</tr>
<tr>
<td>ENT 141, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>ENT 162, Intermediate Surveying</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td>52</td>
</tr>
</tbody>
</table>

YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 163, Advanced Surveying</td>
<td>5</td>
</tr>
<tr>
<td>ENT 211, Hydraulics</td>
<td>5</td>
</tr>
<tr>
<td>ENT 221, Engineering Mechanics - Statics</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 132, Soil Mechanics for Construction</td>
<td>4</td>
</tr>
<tr>
<td>ENT 212, Hydrology</td>
<td>5</td>
</tr>
<tr>
<td>ENT 231, Transportation and Highway Engineering</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 201, Engineering Construction Management</td>
<td>4</td>
</tr>
<tr>
<td>ENT 202, Construction Inspection</td>
<td>3</td>
</tr>
<tr>
<td>ENT 232, Pavement Design</td>
<td>3</td>
</tr>
<tr>
<td>ENT 281, Engineering Design Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td>51</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>103</td>
</tr>
</tbody>
</table>

EPC: 603

* ENT Elective: CS 110 is highly recommended; any ENT or ENGR& course; CS 121 or higher; MATH& 141 or higher; OCSUP 107 or higher; PHYS& 114 or higher; WTM 112 or higher. The elective course must be in addition to the listed required courses.

** Based on placement test results students may need prerequisite courses before enrolling in the math course.

*** Students may elect to take ENT 123, Computer Aided 3-D Modeling for ENT 122.

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
- (W) - ENGL& 101, WRITE 100
- (L) - ENT 292
- (M) - MATH& 142, MATH& 151, OCSUP 107
- (O) - CMST 102, OCSUP 102
- (R) - OCSUP 101
- (J) - Job Seeking Skills
- (L) - Leadership
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations

ASSOCIATE IN SCIENCE DEGREE - OPTION II (ENGINEERING)

This education plan prepares the student for transfer to an ABET-accredited baccalaureate institution.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Apply knowledge of mathematics, sciences, and other related disciplines (TAC/ABET outcome).
- Conduct experiments, as well as analyze and interpret data (TAC/ABET outcome).
- Identify, formulate, and solve applied science problems (TAC/ABET outcome).
- Demonstrate an ability to function on teams (TAC/ABET outcome).
- Explain professional and ethical responsibility (TAC/ABET outcome).
- Demonstrate an ability to communicate effectively (TAC/ABET outcome).
- Recognize the need for and engage in life-long learning (TAC/ABET outcome).
- Identify contemporary issues (TAC/ABET outcome). Use the techniques, skills, and modern applied science tools necessary for professional practice (TAC/ABET outcome).
- Demonstrate a commitment to quality, timeliness and continuous improvement.
- Conduct standardized field and laboratory testing on engineering materials.
- Determine forces and stresses in elementary structural systems.
- Utilize software to solve technical problems.

Transferability: For transfer information at specific institution and/or programs consult with your advisor.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161, General Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>MATH&amp; 141, Precalculus I or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 142, Precalculus II or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>Science or Math or Computer Science Elective</td>
<td>5</td>
</tr>
<tr>
<td>Social Science Elective, recommended ECON&amp; 202, Macroeconomics</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Elective, Recommended ENGR&amp;</td>
<td>5</td>
</tr>
<tr>
<td>Approved Elective, Recommended ENGR&amp;</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Science or Math Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13-16</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>44-47</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151, Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201, Physics for Science and Engineering I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities or Social Science Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152, Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 202, Physics for Science and Engineering II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Elective, Recommended ENGR&amp;</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153, Calculus III or MATH 201, Statistics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 203, Physics for Science and Engineering III</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>46</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>90-93</strong></td>
</tr>
</tbody>
</table>

### Certificates

#### Engineering Graphics Certificate

This certificate prepares the student for employment as a drafting/design technician using AutoCAD and other similar computer software.

**Degree Outcomes:**

- Differentiate different fields and roles of engineering.
- Identify how engineering relates to contemporary issues.
- Demonstrate an ability to function on teams.
- Produce effective laboratory reports and field records.
- Utilize graphic techniques and CAD software to produce engineering documents.
- Utilize productivity software to solve technical problems.
- Set up and utilize modern field survey equipment.
- Estimate material quantities for construction.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td>3</td>
</tr>
<tr>
<td>ENGR&amp; 104, Intro to Design</td>
<td>5</td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>4</td>
</tr>
<tr>
<td>ENT 121, Computer Aided Drafting and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)**</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td>3</td>
</tr>
<tr>
<td>ENT 122, Advanced Computer Aided Design ***</td>
<td>3</td>
</tr>
<tr>
<td>ENT 141, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**EPC: 602C**

* ENT Elective: CS 110 is highly recommended; any ENT or ENGR& course; CS 121 or higher; MATH& 141 or higher; OCSUP 107 or higher; PHYS& 114 or higher; WTM 112 or higher. The elective course must be in addition to the listed required courses.

** Based on placement test results students may need prerequisite courses before enrolling in one of these math courses.

*** Students may elect to substitute ENT 123, Computer Aided 3-D Modeling for ENT 122.

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

- (W) - ENGL& 101, WRITE 100
- (M) - MATH& 142, MATH& 151, OCSUP 107
- (R) - OCSUP 101, PSYC 111, PSYC& 100
- (U) - Job Seeking Skills
- (L) - Leadership
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations

* Approved Electives: MATH 220, 238, &254, CHEM& 162, 163, BIOL& 211, ENGR& 214, 225, CS 131, 141 AND CMST& 220. Please consult your WWCC advisor for other approved electives for your major.
Certificates

Surveying Certificate
This certificate prepares the student for employment as a surveying technician with most city, county, state, federal agencies and private consultants.

Degree available at/via: [Walla Walla]

Degree Outcomes:
- Relate surveying to engineering and contemporary issues.
- Demonstrate an ability to function on teams.
- Produce effective reports and field records.
- Utilize graphic techniques and CAD software to produce survey documents.
- Utilize productivity software to solve technical problems.
- Set up and utilize modern field survey equipment.
- Compute information for land measurement.
- Compute line and grade for construction.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td></td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td></td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)**</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td></td>
</tr>
<tr>
<td>ENT 121, Computer Aided Drafting and Design</td>
<td></td>
</tr>
<tr>
<td>ENT 162, Intermediate Surveying</td>
<td></td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
</tr>
<tr>
<td>Year One Total</td>
<td>29</td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective*</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 104, Intro to Design</td>
<td></td>
</tr>
<tr>
<td>ENT 163, Advanced Surveying</td>
<td></td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>3</td>
</tr>
<tr>
<td>Year Two Total</td>
<td>16</td>
</tr>
</tbody>
</table>

| Grand Total | 45 |

EPC: 624C

- ENT Elective: CS 110 is highly recommended; any ENT or ENGR& course; CS 121 or higher; MATH& 141 or higher; OCSUP 107 or higher; PHYS& 114 or higher; WTM 112 or higher. The elective course must be in addition to the listed required courses.
- **Based on placement test results students may need prerequisite courses before enrolling in one of these math courses.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- **(W)** - ENGL & 101, WRITE 100
- **(M)** - MATH& 142, MATH& 151, OCSUP 107
- **(R)** - OCSUP 101, PSYC 111, PSYC& 100
- **(J)** - Job Seeking Skills
- **(L)** - Leadership

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

Department Overview: English courses at WWCC help students better understand and appreciate the English language. Courses in English assist students in presenting their thoughts in an organized manner and improve their decision-making, problem-solving, and critical thinking. College level courses specifically focus on the development of structural and stylistic writing skills with concentration on a variety of essay techniques and on writing an academic research paper. WWCC offers a full spectrum of English courses that prepare students for college level courses, including vocabulary development, grammar, spelling, and fundamentals in writing sentences and paragraphs.

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: Students must take a placement test to determine enrollment level.

Preparation for Success: In order to succeed in English writing courses, students should take the course recommended by their writing assessment, available in the Student Development Center. Taking the proper course is very important, since writing is best learned in sequence, from the properly composed sentence to the well-researched essay and the imaginative, and structurally sound creative piece. Word-processing skills are essential to the successful English course.

Other Information: All new and re-entering students complete an English writing assessment at Walla Walla Community College. The writing assessment may include a writing sample. As a result of this assessment, students will be enrolled in the most appropriate English course.

The Center for Academic Success is a great place for students to work one-on-one with a tutor to review their writing in any course at the College.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
English as a Second Language

http://wwcc.edu/esl

Susan (Sukey) Binney  509.527.4328  susan.binney@wwcc.edu
Courtney Kress Van Slyke  509.527.4230  courtney.kressvanslyke@wwcc.edu
Janet Danley- Ck  509.758.1703  janet.danley@wwcc.edu

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

Department Overview: Courses in English as a Second Language are offered to limited English proficient (LEP) students. Students are assessed at entry and placed at one of 5 levels. Progress is determined by CASAS post assessment. Instruction is centered on the Washington Adult Learning Standards basic skill areas "listening, speaking, reading, writing," as well as computer literacy. Instruction is in English and incorporates a variety of teaching techniques. Teachers and students work together in a communicative classroom setting with emphasis given to community, civic, personal, and workplace topics.

Program Level Outcomes:

ESL Reading
- Determine the reading purpose.
- Select reading strategies appropriate to the purpose.
- Monitor comprehension and adjust reading strategies.
- Analyze the information and reflect on its underlying meaning.
- Integrate it with prior knowledge to address reading purpose.

ESL Writing
- Determine the purpose for communicating.
- Organize and present information to serve the purpose.
- Pay attention to conventions of English language usage, including grammar, spelling, and sentence structure, to minimize barriers to readers comprehension.
- Seek feedback and revise to enhance the effectiveness of the communication.

ESL Speaking
- Determine the purpose of communicating.
- Organize and relay information to effectively serve the purpose, context, and listener.
- Pay attention to conventions of oral English communication, including grammar, word choice, register, pace, and gesture in order to minimize barriers to listeners comprehension.
- Use multiple strategies to monitor the effectiveness of the communication.

ESL Listening
- Attend to oral information.
- Clarify purpose for listening and use listening strategies appropriate to that purpose.
- Monitor comprehension, adjusting strategies to overcome barriers to comprehension.
- Integrate information from listening with prior knowledge to address the listening purpose.

Enology and Viticulture

AAAS-T, AAAS, CERT

http://wwcc.edu/wine

Danielle Swan-Froese  509.524.5170  danielle.swan-froese@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview:

The Center for Enology and Viticulture provides students with hands-on experience in winemaking, 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 winemaking 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, or an associate of arts transfer degree (WSU) in Enology & Viticulture. A Viticulture Certificate, which is dedicated to the science of wine farming, is also awarded. A Fermentation Certificate, which is dedicated to the science of wine making, is awarded upon completion of the second year of the program.

Students may also choose to earn an Associate in Applied Arts and Sciences Degree in Wine Marketing and Management through the Agri-Business program.

Students planning to pursue a baccalaureate degree in this area should meet with an Enology & Viticulture advisor at WWCC and an advisor at their intended transfer institution to determine an appropriate education plan.

Industry Description: Wine production in the state of Washington has rapidly grown to become an $8.6 billion industry, with more than 50,000 acres of vineyards, 800+ bonded wineries, and a new licensed and bonded winery emerging every month. In the Walla Walla Valley alone, there are nearly 1600 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: 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.

Students must be physically able to safely perform the tasks required in the vineyard and winery, which will include pruning, lifting, climbing, bending, stretching, twisting, crawling and moving, lifting, carrying, pushing and pulling items weighing up to 50 lbs. Ability to taste, smell, and check for optical clarity of wine. Ability to visually inspect and sort wine grapes - checking for diseases and insects - during the growing season through harvest.

Other Information: The Institute also offers short courses in sensory evaluation, barrel making, wine yeasts, wine appreciation, wine consumer education, and hospitality training.

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

Degrees

Associate in Applied Arts and Sciences Degree in Enology & Viticulture

This schedule lists all courses required for completion of the Associate in Applied Arts and Sciences Degree in Enology & Viticulture, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td>Credits</td>
</tr>
<tr>
<td>AGPR 120, Agricultural Chemistry***</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<tr>
<td>EV 107, Introduction to Viticulture and Enology</td>
<td>.5</td>
</tr>
<tr>
<td>EV 196, Viticulture Practicum I</td>
<td>.1</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades (M)</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.21</td>
</tr>
</tbody>
</table>

Winter Quarter | Credits |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 220, Drip Irrigation</td>
<td>.2</td>
</tr>
<tr>
<td>EV 101, Establishing a Vinifera Vineyard</td>
<td>.4</td>
</tr>
<tr>
<td>EV 197, Viticulture Practicum II</td>
<td>.1</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td>EV 299, Professional Wine Leadership (L)</td>
<td>.1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.18</td>
</tr>
</tbody>
</table>

Spring Quarter | Credits |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 230, Plant Diseases and Insects</td>
<td>.5</td>
</tr>
<tr>
<td>EV Elective Offering(s)**</td>
<td>.2</td>
</tr>
<tr>
<td>EV 102, Maintaining a Vinifera Vineyard</td>
<td>.5</td>
</tr>
<tr>
<td>EV 198, Viticulture Practicum III</td>
<td>.1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR TWO</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td>Credits</td>
</tr>
<tr>
<td>EV 203, Science of Winemaking I</td>
<td>.3</td>
</tr>
<tr>
<td>EV 286, Winemaking Practicum I</td>
<td>.3</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>.3 - .5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>.5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.14 - .16</td>
</tr>
</tbody>
</table>

Winter Quarter | Credits |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EV Elective Offering(s)**</td>
<td>.2</td>
</tr>
<tr>
<td>EV 204, Science of Winemaking II</td>
<td>.5</td>
</tr>
<tr>
<td>EV 287, Winemaking Practicum II</td>
<td>.1</td>
</tr>
<tr>
<td>EV 108, Wine Industry Marketplace (J)</td>
<td>.3</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>.3 - .5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.14 - .16</td>
</tr>
</tbody>
</table>

Spring Quarter | Credits |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>.5</td>
</tr>
<tr>
<td>EV Elective Offering(s)**</td>
<td>.2</td>
</tr>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
<td>.2</td>
</tr>
<tr>
<td>EV 189, Sensory Analysis of Wine</td>
<td>.3</td>
</tr>
<tr>
<td>EV 193, Winery Operations Management</td>
<td>.3</td>
</tr>
<tr>
<td>EV 205, Science of Winemaking III</td>
<td>.5</td>
</tr>
<tr>
<td>EV 288, Winemaking Practicum III</td>
<td>.1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>.21</td>
</tr>
</tbody>
</table>

Total Year One Credits | .57 |

Total Year Two Credits | .49 - .53 |

Total Credits | .106 - 110 |

* - Students must complete related instruction requirements in the following categories to receive a certificate: Written Communications, Computation/ Mathematics, and Human Relations. Students must complete all six related instruction categories for the degree.

Prerequisite: Students must complete the Viticulture Science Certificate before completing the Fermentation Science Certificate.

** - EV elective offerings: AGPR 105, Weed Biology and Identification; AGPR 114, Plant Physiology; CA 133, Food and Wine/Beverage; GEOG& 207, Economic Geography; and/or any EV class 100 level or higher that is not already listed as part of the required EV program curriculum can be taken to fulfill the elective requirements including EV 297. A total of five elective credits must be met for degree completion.

*** - Students may take either AGPR 120, Agricultural Chemistry or CHEM& 110, Chemical Concepts with Lab.

(W) - BUS 102, BUS 157, ELECT PSYC2, PSYC 111, PSYC& 100
(O) - CMST 102, ELECT CMST1, OCSUP 102
(R) - ENGL 101
(J) - EV 108
(L) - EV 299
(M) - OCSUP 105

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

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

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

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td></td>
</tr>
<tr>
<td>EV 203, Science of Winemaking I</td>
<td>3</td>
</tr>
<tr>
<td>EV 286, Winemaking Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking** (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14 - 16</td>
</tr>
<tr>
<td>Winter Quarter</td>
<td></td>
</tr>
<tr>
<td>EV Elective Offering(s)*</td>
<td>2</td>
</tr>
<tr>
<td>EV 287, Winemaking Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>EV 204, Science of Winemaking II</td>
<td>2</td>
</tr>
<tr>
<td>EV 108, Wine Industry Marketplace (J)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>3 - 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14 - 16</td>
</tr>
<tr>
<td>Spring Quarter</td>
<td></td>
</tr>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>EV Elective Offering(s)*</td>
<td>2</td>
</tr>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
<td>2</td>
</tr>
<tr>
<td>EV 189, Sensory Analysis of Wine</td>
<td>3</td>
</tr>
<tr>
<td>EV 193, Winery Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>EV 205, Science of Winemaking III</td>
<td>2</td>
</tr>
<tr>
<td>EV 288, Winemaking Practicum III</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>Total Year One Credits</strong></td>
<td>49 - 53</td>
</tr>
</tbody>
</table>

* - EV elective offerings: AGPR 105, Weed Biology and Identification; CUL 210, Wine with Food; and/or any EV class 100 level or higher that is not already listed as part of the required EV program curriculum can be taken to fulfill the elective requirements including EV 297. Up to two credits of EV 180 can be counted for elective credits. A Total of ten elective credits must be met for degree completion.
** - Students must complete related instruction requirements in the following categories to receive a certificate: Written Communications, Computation/Mathematics, and Human Relations. Students must complete all six related instruction categories for the degree.
Prerequisite: Students must complete the Viticulture Science Certificate before completing the Fermentation Science Certificate.

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

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

(W) - Written Communications
(R) - Human Relations
(M) - Computation/Mathematics
(J) - Job Seekings Skills

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td></td>
</tr>
<tr>
<td>AGPR 120, Agricultural Chemistry**</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>EV 107, Introduction to Viticulture and Enology</td>
<td>5</td>
</tr>
<tr>
<td>EV 196, Viticulture Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>21</td>
</tr>
<tr>
<td>Winter Quarter</td>
<td></td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>5</td>
</tr>
<tr>
<td>EV 101, Establishing a Vinifera Vineyard</td>
<td>4</td>
</tr>
<tr>
<td>EV 197, Viticulture Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td>WTM 220, Drip Irrigation</td>
<td>2</td>
</tr>
<tr>
<td>EV 299, Professional Wine Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
</tr>
<tr>
<td>Spring Quarter</td>
<td></td>
</tr>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 230, Plant Diseases and Insects</td>
<td>5</td>
</tr>
<tr>
<td>EV Elective Offering(s)*</td>
<td>2</td>
</tr>
<tr>
<td>EV 102, Maintaining a Vinifera Vineyard</td>
<td>5</td>
</tr>
<tr>
<td>EV 198, Viticulture Practicum III</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>57</td>
</tr>
<tr>
<td><strong>Total Year One Credits</strong></td>
<td>57</td>
</tr>
</tbody>
</table>

* - EV elective offerings: AGPR 105, Weed Biology and Identification; CUL 210, Wine with Food; and/or any EV class 100 level or higher that is not already listed as part of the required EV program curriculum can be taken to fulfill the elective requirements including EV 297. Up to two credits of EV 180 can be counted for elective credits. A Total of ten elective credits must be met for degree completion.
** - Students may take either AGPR 120, Agricultural Chemistry or CHEM& 110, Chemical Concepts with Lab

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.
CIP:01.0309
EPC: 121

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Environmental Sciences studies

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

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

AAAS, CERT
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 Farriers' 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.wtb.wa.gov/etp.

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.
Farrier Science Certificate

This certificate is equivalent to the first year of the AAAS Degree in Farrier Science.

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.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>ART 115, Drawing for Farrier Science</td>
<td>1</td>
</tr>
<tr>
<td>FRR 194, Basic Shoeing</td>
<td>18</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>BIOL 150, Applied Equine Biology</td>
<td>3</td>
</tr>
<tr>
<td>FRR 195, Intermediate Shoeing</td>
<td>18</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>FRR 197, Advanced Shoeing</td>
<td>18</td>
</tr>
<tr>
<td>FRR 162, Small Business Management for Farriers</td>
<td>2</td>
</tr>
<tr>
<td>FRR 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>FRR 245, Advanced Hoof Preparation and Shoeing</td>
<td>16</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>FRR 255, Advanced Forging - Homemade Shoe Unit</td>
<td>16</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>FRR 283, Therapeutic Shoeing</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>54</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>126</strong></td>
</tr>
</tbody>
</table>

EPC: 120

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

- (J) - AGPR 100, OCSUP 103
- (W) - BUS 137, WRITE 100
- (L) - FRR 299, OCSUP 299
- (M) - BUS 112, MATH 072B, OCSUP 106
- (O) - CMST 102, CMST& 220, OCSUP 102
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC& 100
- (J) - Job Seeking Skills (L) - Leadership
- (M) - Computation/Mathematics (O) - Oral Communications
- (W) - Written Communications (R) - Human Relations
Fire Science

AAAS, CERT

http://wwcc.edu/fire

Bradley Mason  509.527.4579  bradley.mason@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

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.
- 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.wtb.wa.gov/etp.

Degrees

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] [Online (partial)]

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 the material.
- 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.

For the most current information see: www.wwcc.edu
Transfers: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
</tr>
<tr>
<td>FCA 100, Introduction to Firefighting (J)</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace *</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA 111, Fundamentals of Firefighting</td>
<td>5</td>
</tr>
<tr>
<td>FCA 137, Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FCA 170, Hazmat Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH&amp; 107, Math in Society (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA 115, Advanced Firefighting</td>
<td>8</td>
</tr>
<tr>
<td>FCA 177, Wild Land Fire Management</td>
<td>3</td>
</tr>
<tr>
<td>HO 130, Emergency Medical Technician</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

| Year One Total | 49 |

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 110, Chemical Concepts with Lab</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>5</td>
</tr>
<tr>
<td>FCA 130, Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FCA 152, Building Construction</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>FCA 120, Fire Investigation</td>
<td>3</td>
</tr>
<tr>
<td>FCA 190, Uniform Fire Codes and Inspections</td>
<td>4</td>
</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA 155, Fire Instructor I</td>
<td>3</td>
</tr>
<tr>
<td>FCA 160, Fire Tactics I</td>
<td>3</td>
</tr>
<tr>
<td>FCA 299, Leadership (L)</td>
<td>3</td>
</tr>
<tr>
<td>SOC&amp; 101, Introduction to Sociology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

| Year Two Total | 47 |

| Grand Total | 96 |

EPC: 828

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

(J) - FCA 100
(W) - ENGL 101, ENGL 102
(L) - FCA 299
(M) - MATH& 107
(O) - CMST& 220
(R) - PSYC& 100

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
</tr>
<tr>
<td>FCA 100, Introduction to Firefighting (J)</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace *</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA 111, Fundamentals of Firefighting</td>
<td>5</td>
</tr>
<tr>
<td>FCA 137, Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FCA 170, Hazmat Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH&amp; 107, Math in Society (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA 115, Advanced Firefighting</td>
<td>8</td>
</tr>
<tr>
<td>FCA 177, Wild Land Fire Management</td>
<td>3</td>
</tr>
<tr>
<td>HO 130, Emergency Medical Technician</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

| Year One Total | 49 |

| Grand Total | 49 |

EPC: 828C

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

(J) - FCA 100
(W) - ENGL 101, ENGL 102
(L) - FCA 299
(M) - MATH& 107
(O) - CMST& 220

Certificates

### Fire Science Certificate

This certificate is equivalent to the first year of the AAAS Degree in Fire Science.

**Degree available at/via:** [Walla Walla] [Online (partial)]

**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 the material.
- 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.
- 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.

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

http://www.wwcc.edu/french

Edith Liebrand 509.527.4659 edith.liebrand@wwcc.edu

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:

- 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: 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

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.

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

Program Level Outcomes:

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

Degrees: Students may earn an Associate in Science Degree - Option I (90 credits) which is designed to prepare students for upper division study in geology. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate education plan.

Preparation for Success: Students interested in a major in Geology should take additional courses in chemistry, physics and mathematics. Students considering Environmental Geology should also take courses in environmental science, biology and ecology.

**Degrees**

**Associate in Science Degree - Option I (Geology)**

Recommended two-year schedule (Option I). For other degree information, students should check with their advisors, transfer center staff, and college degree guidelines. Students should also note that it is extremely important to begin sequential courses in the fall since those courses are typically offered one quarter per year.

**Transferability:** For transfer information at specific institution and/or programs consult with your advisor.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 161, General Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>MATH&amp; 141, Precalculus I or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>GEOL&amp; 101, Introduction to Physical Geology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 162, General Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 142, Precalculus II or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Quarter Three

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 163, General Chemistry III with Lab</td>
</tr>
<tr>
<td>Physical Education Elective</td>
</tr>
<tr>
<td>Humanities or Social Science Elective</td>
</tr>
<tr>
<td>Social Science Elective</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

### Year One Total

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities Elective</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 121, General Physics I or PHYS 201, Eng Physics</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151, Calculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 122, General Physics II or PHYS 202, Eng Physics</td>
<td>5</td>
</tr>
<tr>
<td>GEOL&amp; 103, Historical Geology</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152, Calculus II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Elective</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>MATH&amp; 153, Calculus III or MATH 201, Statistics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 123, General Physics III or PHYS 203, Eng Physics</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Year Two Total

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

### Grand Total

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

**EPC: 004G**

**Health Science Education**

Rebecca Manderscheid  509.527.4240  rebecca.manderscheid@wwcc.edu

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

Department Overview: Walla Walla Community College’s Health Science Cluster is an overview of healthcare career related programs and education courses offered at one or both WWCC campuses. Detailed information about each program is available at their individual program web pages.

The Health Science Cluster includes the following programs / courses:

### Degrees and Certifications

**Allied Health and Safety Education**

• Nursing Assistant Certificate
• Emergency Medical Technician Certificate
• Phlebotomy Certificate
• Spanish Medical Interpreter Certificate

**Fire Science**

• Associate in Applied Arts and Sciences in Fire Science
• Fire Science Certificate
• Medical Assisting
• Medical Assisting Certificate
Office Technology
- Associate in Applied Arts and Sciences Degree In Medical Administrative Assistant
- Medical Billing Specialist Certificate
- Medical Transcription Certificate
- Medical Office Aide

Nursing
- Associate in Applied Science-Transfer in Nursing
- Associate Degree in Nursing
- Practical Nurse Certificate

Industry Description: Because of the growing population and increased aging sector of our country, there is a demand for trained workers in a variety of healthcare related occupations. The healthcare industry is experiencing shortages of qualified, competent healthcare workers. Health services jobs are listed as some of the most in-demand jobs with high future growth nationally, in the state of Washington, and in our local region.

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. Placement testing is required for all new WWCC students and specific healthcare programs may require additional placement tests. Emergency Medical Technician, Fire Science, Medical Assisting, Phlebotomy, Nursing, Nursing Assisting, and Spanish Medical Interpreter require a separate application for entry. Applications are available for download at program web pages, or they may be picked up in the Health Science Building Administrative lobby area.

Other Information: Many programs are in high demand and waitlists may be expected, so please plan accordingly. Students should contact individual programs early and expect to follow separate application procedures. Information about applying can be found on each individual department website (see links above).

High School Completion
http://www.wwcc.edu/highschool

Gary Benefiel 509.527.4577  gary.benefiel@wwcc.edu
Kim Cassetto 509.527.4687  kim.cassetto@wwcc.edu

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

Department Overview: The High School Completion program provides another alternative for students needing to complete their high school diploma. In order to enroll in the program, students must bring transcripts from all high schools they have attended. Students must complete a placement test prior to meeting with their advisor. Washington residents enrolled in high school completion classes who are under 19 years of age pay full tuition and must have a release from their high school to participate in the program. Residents who are 19 or older pay $19 per credit. Non-residents need to inquire about the fee schedule at the Student Development Center.

History
http://www.wwcc.edu/history

Jim Peitersen 509.527.4601  james.peitersen@wwcc.edu
John Van Slyke 509.527.4493  john.vanslyke@wwcc.edu
James Bower- Clk 509.758.1771  james.bower@wwcc.edu

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

Department Overview: History is the study of past human experiences. Only by learning about that past can we come to know the fullness of humankind’s ideas and actions, tragedies, and triumphs. But, while we learn of the past, we are also learning about the present. The History department at WWCC provides courses to meet general education needs in the first two years of a college career in American history and World history. In addition to these introductory courses specialty courses are offered in a number of different areas. These courses have no academic prerequisites and are open to all interested persons.

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

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

Preparation for Success: History is a study that emphasizes interpreting past human experiences through evidence such as written record and cultural materials. As such it is a useful to take additional courses in the social sciences and humanities. Strong research and writing skills are required for success in this discipline.

Humanities
http://www.wwcc.edu/humanities

Jesse Burgess 509.527.1869  jesse.burgess@wwcc.edu
James Bower- Clk 509.758.1771  james.bower@wwcc.edu

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

Department Overview: Humanities courses (those with a HUM designation) focus on a blend of topics in art, philosophy, history, religion, music, theatre, film, literature, and architecture. Many of these topics are also found in specialized courses (literature, philosophy, music, art, and theatre) but courses with the HUM designation always involve more than one of these topics and often include material in cultural studies.
Program Level Outcomes:

- Demonstrates a comprehension of culturally diverse works in the humanities.
- Demonstrates an understanding and working knowledge of terminology commonly used in the humanities.
- Demonstrates 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).

Industrial First Aid

http://wwcc.edu/alliedhealth

Bradley Mason 509.527.4579 bradley.mason@wwcc.edu

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: Medic First Aid, First Responder, Emergency Medical Technician (EMT-B and ILS), CPR for Healthcare Providers, Nursing Assistant, Fundamentals of Caregiving, Phlebotomy, Medical Assisting, Chemical Dependency Counseling, 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. The following is a list of courses offered to help students obtain necessary state requirements and/or provide enrichment for increased information: Nursing Assistant Training Program, Fundamentals of Caregiving-Basic, Fundamentals of Caregiving-Modified, Nurse Delegation, Introduction to Health Services, Phlebotomy, AIDS Education, AIDS/Blood Borne Pathogens Training, Chemical Dependency Counseling Education, OTEP Training, Medic First Aid, Medic First Aid Recertification, and CPR (Heartsaver, Healthcare Provider, Pediatric-Basic), CPR Instructor Certification and Recertification.

The Allied Health and Safety Education Department also offer a variety of Healthcare Education training opportunities for professional to include: Pharmacology, Basic Arrhythmias, 12 Lead ECG, Physical Assessment, and continuing education conferences.

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 health care 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.

John Deere Technology

AAAS

http://wwcc.edu/johndeere

Andy Winnett 509.527.4251 wallace.winnett@wwcc.edu
Cullen Coulston 509.527.4579 cullen.coulston@wwcc.edu
Les Echtenkamp 509.529.4449 les.echtenkamp@wwcc.edu

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 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.

**Degrees**

**Associate in Applied Arts and Sciences**  
**Degree in John Deere Technology**

This technical degree is a two-year mechanics program designed to upgrade the technical competence and professional level of the incoming dealer technician. The degree involves classroom lecture and laboratory experiences with John Deere products on the campus and a unique paid work experience for students at a John Deere sponsoring dealership.

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

**Degree Outcomes:**

- Use Service Advisor electronic parts and technical manuals.
- Perform basic engine diagnostic procedure and tune up.
- Diagnose electrical problems.
- Diagnose and safely repair air conditioning systems.
- Repair and adjust John Deere fuel systems.
- Rebuild John Deere gas and diesel engines.
- Make proper ballasting adjustments to a tractor depending on type of implement and field.
- Repair various hydraulic components by using a technical manual.
- Disassemble, assemble, and test all types of John Deere agricultural power train components.
- Build, repair, and diagnose circuits in each application.
- Troubleshoot row crop planters, grain drill planters, and monitoring systems.
- Adjust various types of harvesting equipment for maximum productivity.
- Repair various hydraulic controlled transmissions, hydraulic valves, and controllers.

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

### Odd Year One

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 102, Forklift Safety Training and Certification</td>
<td>1</td>
</tr>
<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 105, Intro to Quant Prob Solving Skills (M)</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Winter Quarter

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 139, Agriculture Safety and Health</td>
</tr>
<tr>
<td>JD 101, John Deere Fundamentals and Orientation</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
</tr>
<tr>
<td>JD 105, John Deere Hydraulics</td>
</tr>
<tr>
<td>JD 115, John Deere Electrical</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

### Spring Quarter

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 190, Cooperative Work Experience I</td>
</tr>
<tr>
<td>JD 192, Cooperative Seminar I (R)</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

### Summer Quarter

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 120, John Deere Heating and Air Conditioning</td>
</tr>
<tr>
<td>JD 125, John Deere Fuel and Emissions Systems</td>
</tr>
<tr>
<td>JD 131, Engine Testing, Repair, and Performance</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
<tr>
<td><strong>Total Year One Credits</strong></td>
</tr>
</tbody>
</table>

### Year Two

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

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 210, John Deere Power Train</td>
<td>8</td>
</tr>
<tr>
<td>JD 221, Ag Management Solutions</td>
<td>4</td>
</tr>
<tr>
<td>JD 225, John Deere Planting Equipment</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 290, Cooperative Work Experience III</td>
<td>16</td>
</tr>
<tr>
<td>JD 292, Cooperative Seminar III (L)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 215, John Deere Electronics</td>
<td>5</td>
</tr>
<tr>
<td>JD 230, John Deere Harvesting Equipment</td>
<td>4</td>
</tr>
<tr>
<td>JD 235, John Deere Hydraulics II</td>
<td>5</td>
</tr>
<tr>
<td>JD 240, John Deere Advanced Power Training II</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Total Year Two Credits</strong></td>
<td><strong>72</strong></td>
</tr>
<tr>
<td><strong>Total Two Years Credits</strong></td>
<td><strong>143.4</strong></td>
</tr>
</tbody>
</table>

(W) - WRITE 100, BUS 137, ENGL 097, ENGL& 101  
(R) - JD 192  
(M) - OCSUP 106, MATH 072B  
(L) - JD 292  
(O) - OCSUP 102, CMST& 220, CMST 102  
(J) - JD 193  
(W) - Written Communications  
(R) - Human Relations  
(M) - Computation/Mathematics  
(J) - Job Seekings Skills  
(L) - Leadership

---

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

135
### Even Years Fall Start

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter 1st Quarter</strong></td>
<td>JD 102, Forklift Safety Training and Certification</td>
<td>. . . . . . 1</td>
</tr>
<tr>
<td></td>
<td>AGPR 139, Agriculture Safety and Health</td>
<td>. . . . . . 3</td>
</tr>
<tr>
<td></td>
<td>JD 101, John Deere Fundamentals and Orientation</td>
<td>. . . . . . 3</td>
</tr>
<tr>
<td></td>
<td>IFA 022, Medic First Aid Basic</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>JD 105, John Deere Hydraulics</td>
<td>. . . . . . 8</td>
</tr>
<tr>
<td></td>
<td>JD 115, John Deere Electrical</td>
<td>. . . . . . 8</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 23.4</td>
</tr>
<tr>
<td><strong>Winter Quarter 2nd Quarter</strong></td>
<td>JD 190, Cooperative Work Experience I</td>
<td>. . . . . . 16</td>
</tr>
<tr>
<td></td>
<td>JD 192, Cooperative Seminar I (R)</td>
<td>. . . . . . 2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 18</td>
</tr>
<tr>
<td><strong>Spring Quarter 3rd Quarter</strong></td>
<td>JD 120, John Deere Heating and Air Conditioning</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>JD 125, John Deere Fuel and Emissions Systems</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>JD 131, Engine Testing, Repair, and Performance</td>
<td>. . . . . . 10</td>
</tr>
<tr>
<td></td>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>. . . . . . 5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 23</td>
</tr>
<tr>
<td><strong>Summer Quarter 4th Quarter</strong></td>
<td>JD 191, Cooperative Work Experience II</td>
<td>. . . . . . 16</td>
</tr>
<tr>
<td></td>
<td>JD 193, Cooperative Seminar II (J)</td>
<td>. . . . . . 2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 18</td>
</tr>
<tr>
<td></td>
<td><strong>Total Year One Credits</strong></td>
<td>. . . . . . 82.4</td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter 5th Quarter</strong></td>
<td>JD 210, John Deere Power Train</td>
<td>. . . . . . 8</td>
</tr>
<tr>
<td></td>
<td>JD 221, Ag Management Solutions</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>JD 225, John Deere Planting Equipment</td>
<td>. . . . . . 3</td>
</tr>
<tr>
<td></td>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>. . . . . . 3</td>
</tr>
<tr>
<td></td>
<td>WELD 141, Welding Basics</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 22</td>
</tr>
<tr>
<td><strong>Winter Quarter 6th Quarter</strong></td>
<td>JD 290, Cooperative Work Experience III</td>
<td>. . . . . . 16</td>
</tr>
<tr>
<td></td>
<td>JD 292, Cooperative Seminar III (L)</td>
<td>. . . . . . 2</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 18</td>
</tr>
<tr>
<td><strong>Spring Quarter 7th Quarter</strong></td>
<td>JD 215, John Deere Electronics</td>
<td>. . . . . . 5</td>
</tr>
<tr>
<td></td>
<td>JD 230, John Deere Harvesting Equipment</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>JD 235, John Deere Hydraulics II</td>
<td>. . . . . . 5</td>
</tr>
<tr>
<td></td>
<td>JD 240, John Deere Advanced Power Training II</td>
<td>. . . . . . 4</td>
</tr>
<tr>
<td></td>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>. . . . . . 3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 21</td>
</tr>
<tr>
<td></td>
<td><strong>Total Year Two Credits</strong></td>
<td>. . . . . . 61</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>. . . . . . 143.4</td>
</tr>
</tbody>
</table>

(W) - WRITE 100, BUS 137, ENGL 097, ENGL& 101  
(R) - JD 192  
(M) - OCSUP 105, MATH 072B  
(L) - JD 292  
(O) - OCSUP 102, CMST& 220, CMST 102  
(J) - JD 193  
(W) - Written Communications  
(O) - Oral Communications  
(R) - Human Relations  
(M) - Computation/Mathematics  
(J) - Job Seekings Skills  
(L) - Leadership

Mathematics

http://wwcc.edu/math

Jennifer Leber 509.527.4245 jennifer.leber@wwcc.edu
Julianne Sachs 509.527.3662 julianne.sachs@wwcc.edu
Megan Schoessler 509.527.4617 megan.schoessler@wwcc.edu
Eric Schultz 509.527.4281 eric@wwcc.edu
Michael Shively 509.758.1726 michael.shively@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

**Department Overview:**

Mathematics is important in virtually every field of study. The purpose of the mathematics department is to offer courses to a wide variety of students. The courses offered in the math department are meant to satisfy the needs of both majors and non-majors in mathematics. They provide basic instruction for students interested in a broad educational experience.

The general student will find preparatory courses in introductory algebra, intermediate algebra, pre-calculus and traditional mathematics courses such as finite mathematics, calculus, and statistics. The department strives to offer learning experiences that reflect the latest current teaching methodologies and implements current technological innovations and tools.

**Program Level Outcomes:**

- The ability to analyze problems to determine what mathematical principles apply.
- Logical reasoning and mathematical principles to solve problems.
- An ability to interpret information and reasoning expressed mathematically (symbols, tables, graphs, formulas, etc.).
- The ability to communicate mathematical information effectively.
- Mathematical skills in critical thinking and reasoning.

**Degrees:** Students may earn an Associate in Arts degree (90 credits) or an Associate in Math Education (for students planning to teach high school math) which are both designed to prepare students for upper division study in math. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate education plan.

**Entrance Requirements:** Students must take a placement test to determine enrollment level.

**Preparation for Success:** High school students interested in a major in Mathematics should take four years of high school mathematics including a year of mathematics their senior year. Those planning to take 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: WWW.WWCC.EDU**
Medical Assisting

CERT

http://www.wwcc.edu/medicalassisting

Tami Mitchell 509.527.4330 tami.mitchell@wwcc.edu
Chad Miltenberger Clrk 509.758.1711 chad.miltenberger@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

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 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
1361 Park Street, Clearwater, FL 33756
www.caahep.org

Program Level Outcomes:
• The Medical Assisting student will employ appropriate medical terminology to communicate professionally and accurately in the clinic setting, both verbally and in their documentation.
• The Medical Assisting student 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 student 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: 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.

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.

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.

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

Degree 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 student 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 student will integrate knowledge gained in medical assisting courses to prepare for and assist with medical emergencies.
• The Medical Assisting student will use technology skills, including computer hardware and software, in the performance of clinical and administrative competencies.
• The Medical Assisting student will employ appropriate medical terminology to communicate professionally and accurately in the clinic setting, both verbally and in their documentation.
• The Medical Assisting student 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 student will be prepared to enter the profession competently, as entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Other Information: Students must complete CS 100, Introduction to Microcomputers and OT 025 Keyboarding prior to entering the program.

** Year One **

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 105, Health Occupations Mathematics (M)**</td>
<td>.5</td>
</tr>
<tr>
<td>MEDA 110, Human Body Structure and Function in Health and Disease I</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR 051, Basic Life Support (BLS) for Healthcare Providers</td>
<td>.7</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>.7</td>
</tr>
<tr>
<td>HO 172, Pharmacology</td>
<td>.2</td>
</tr>
<tr>
<td>HO 174, Transcultural Competency for Health Professionals</td>
<td>.2</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td>MEDA 114, Therapeutic Relationships (R)</td>
<td>.2</td>
</tr>
<tr>
<td>MEDA 120, Human Body Structure and Function in Health and Disease II</td>
<td>.5</td>
</tr>
<tr>
<td>MEDA 140, Medical Law and Ethics</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14.8</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 125, Clinical Procedures</td>
<td>.10</td>
</tr>
<tr>
<td>MEDA 144, Medical Office Administrative Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>MEDA 145, Office Emergencies for Medical Assistants</td>
<td>.1</td>
</tr>
<tr>
<td>MEDA 149, Medical Insurance Procedures For Medical Assisting</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 191, Medical Assisting Practicum</td>
<td>.7</td>
</tr>
<tr>
<td>MEDA 192, Medical Assisting Seminar (L)</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>62.8</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>62.8</strong></td>
</tr>
</tbody>
</table>

** Other Information:** Students must complete CS 100, Introduction to Microcomputers and OT 025 Keyboarding prior to entering the program.

** 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.
The Nursing program at WWCC

http://wwcc.edu/nursing

Kathleen Adamski 509.527.4240 kathleen.adamski@wwcc.edu
Brenda Anderson 509.527.4327 brenda.anderson@wwcc.edu
Robert Becker 509.527.4334 robert.becker@wwcc.edu
Grace Hiner 509.527.4421 grace.hiner@wwcc.edu
Sherri Jones 509.527.4248 sherri.jones@wwcc.edu
Ilona Pease-Verwer 509.527.4244 ilona.verwer@wwcc.edu
Lana Toelke 509.527.4242 lana.toelke@wwcc.edu
Michael Ayres-Clk 509.758.1728 michael.ayres@wwcc.edu
Genevieve Bross-Clk 509.758.1787 genevieve.bross@wwcc.edu
Kaye McGehee-Clk 509.758.1717 kaye.mcgehee@wwcc.edu
Stephanie Macom Moore-Clk 509.758.1786 stephanie.macommoore@wwcc.edu
Susan Rammelsberg-Clk 509.758.1705 susan.rammelsberg@wwcc.edu

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

Department Overview: The Nursing program at WWCC is approved by the Washington State Nursing Care Quality Assurance Commission: 111 Israel Rd. SE, Tumwater, WA 98501, phone (360) 236-4700, (www.doh.wa.gov). The Associate Degree Nursing Program is also accredited by the Accreditation Commission for Education in Nursing—ACEN (formerly called the National League for Nursing Accrediting Commission- NLNAC): 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326. Phone (404) 975-5000. (http://acenursing.org/)

Program Level Outcomes:
The program’s three-year mean for the licensure pass rate (NCLEX-RN) will be at or above the national mean for the same three-year period.

Seventy percent (70%) or more of students who enter the program will earn at least one award, either PN or ADN/AAS-T Nursing degree within four years of admission.

Graduates will rate overall program satisfaction at average or better (≥ 2.5) on a 1-4 point scale.

Employers of the nursing program graduates will rate preparation of graduates at average or above (≥ 2.5) on a 1-4 point scale.

Ninety percent (90%) of the Nursing graduates will be employed in nursing and/or enrolled in a bachelor’s degree program six months after graduation.

All graduates will meet the WWCC Competencies for the ADN/AAS-T Nursing degree in the foundational concepts of Critical Thinking, Caring, and Professional Behaviors.

Degrees and Certificates: The Nursing Program encompasses two professional levels of nursing: Practical Nursing (PN) and Associate Degree Nursing (ADN) or Associate in Applied Science-Transfer (AAS-T) Nursing degree. The college also has an Nursing Assistant program (see Allied Health). Graduates, upon successful completion of the licensing examination (NCLEX), may practice at the designated level. 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 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).

The Associate Degree in Nursing (ADN) or Associate in Applied Science-Transfer (AAS-T) Nursing degree utilize the nursing process to provide and/or supervise client care while maintaining responsibility and accountability for the quality of nursing care provided in complex and varied situations. Graduates who complete the ADN or AAS-T Nursing degree are eligible to take the National Council Licensure Examination for Registered Nursing (NCLEX-RN). If successful, they are licensed as Registered Nurses (RN).

Students planning to pursue a baccalaureate degree in Nursing should consult with a pre-nursing advisor at WWCC and an advisor at their intended transfer institution to determine an appropriate education plan. Washington State University (WSU) offers Bachelors and Masters degrees in nursing onsite at WWCC. For more information call or email Linda Miller at 509.372.7202 or millerl@tri.city.wsu.edu.

Industry Description: Nursing is the largest health care profession, nationally, regionally and locally. Employment for RNs will grow faster than the average for all occupations through 2020. There will always be a need for nurses in hospitals, but an increasing number of nurses will be employed in home health, long-term care, and ambulatory care settings.

Other Information: The Nursing program strongly encourages students to complete as many of the nursing support courses as possible before entrance into the Nursing program. These courses provide points toward admission. For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.wtb.wa.gov/etp.

Degrees and Certificates

Practical Nursing

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). The PN Exit option is not accredited by ACEN.

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

Certificate Outcomes:

- Demonstrate critical thinking in the use of the nursing process.
- Demonstrate use of management/leadership principles in the delivery of client care.
- Perform interventions in a safe and effective manner.
- Use therapeutic communication.
- Demonstrate professional behaviors.
Program Requirements for Admission:

Students may prepare for nursing admission by meeting the minimum program requirements outlined below. Students are responsible to submit 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.

Pre-requisites:
The following competencies and/or courses MUST be completed prior to the April 15 application deadline. Applicants who have not completed the Chemistry, Math, Biology and English competency levels will not be admitted during the first round of application review and admissions.

- Chemistry: Completion of a five credit college level introductory chemistry course with a lab. Grade must be 2.0 (C) or better.
- Mathematics: Completion of Math 201 Introduction to Statistics with a 2.0 (C) grade or better.
- Biology: Eligible to enter Biology 251 (Human Anatomy & Physiology I), or completion of Biology 160 General Biology w/ Lab (grade must be 2.0 (C) or better).
- English: Eligible to enter English 101 (Composition) based on:
  - Placement Tests offered by WWCC’s Student Development Center, or
  - Completion of pre-requisite college coursework.

Other Information:

It is highly recommended that as many as possible of the pre-requisite and support courses listed below be completed prior to the application deadline in order to achieve the highest possible points toward admission. A Nursing Assistant course or the completion of college level classes could add possible points toward admission. A Nursing Assistant course or the completion of college level classes could add

PRIOR TO ENTERING THE NURSING PROGRAM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 251, Human A &amp; P I</td>
<td>0.5</td>
</tr>
<tr>
<td>BIOL&amp; 252, Human A &amp; P II</td>
<td>0.5</td>
</tr>
<tr>
<td>BIOL&amp; 260, Microbiology</td>
<td>0.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition</td>
<td>0.5</td>
</tr>
</tbody>
</table>

BEFORE THE END OF FIRST YEAR (Support Courses):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100, General Psychology</td>
<td>0.5</td>
</tr>
<tr>
<td>(by the end of fall quarter)</td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 200, Lifespan Psychology</td>
<td>0.5</td>
</tr>
<tr>
<td>(by the end of winter quarter)</td>
<td></td>
</tr>
<tr>
<td>NUTR&amp; 101, Nutrition</td>
<td>0.5</td>
</tr>
<tr>
<td>(by the end of spring quarter)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL CREDITS: ............ 45

includes Chemistry and Math 201
(Introduction to Statistics) pre-requisites

The following Nursing courses must be completed after being admitted into the Nursing Program.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 100, Fundamentals of Nursing</td>
<td>...6</td>
</tr>
<tr>
<td>NURS 110, Fundamentals Practicum</td>
<td>...4</td>
</tr>
<tr>
<td>NURS 196, Professional Development I</td>
<td>...1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 101, Beginning Nursing Concepts I</td>
<td>...6</td>
</tr>
<tr>
<td>NURS 111, Practicum I</td>
<td>...4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 102, Beginning Nursing Concepts II</td>
<td>...6</td>
</tr>
<tr>
<td>NURS 112, Practicum II</td>
<td>...4</td>
</tr>
<tr>
<td>NURS 197, Professional Development II</td>
<td>...1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four*</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 103, Practical Nursing</td>
<td>...6</td>
</tr>
<tr>
<td>NURS 113, Practical Nursing Practicum</td>
<td>...6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>44</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>89</strong></td>
</tr>
</tbody>
</table>

[44 Nursing credits, 45 pre-requisites/support credits]

* Practical Nursing Certificate requires completion of summer quarter. The ADN and AAS-T Nursing degrees do not require summer quarter.

EPC: 326

Associate in Applied Science - Transfer Nursing

AAS-T

Graduates who complete the AAS-T Nursing degree are eligible to take the National Council Licensure Examination (NCLEX-RN) for Registered Nursing. If successful, they are licensed as Registered Nurses. 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 Nursing (BSN) program and requires only a limited number of additional pre-requisites/support courses for direct transfer. Articulation Agreements for transfer to complete a BSN degree exist with Washington State University, Lewis and Clark State College, and Western Governor’s University.

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

Degree Outcomes:

- Demonstrate critical thinking in the use of the nursing process.
- Demonstrate use of management/leadership principles in the delivery of client care.
- Perform interventions in a safe and effective manner.
- Use therapeutic communication.
- Demonstrate professional behaviors.

Program Requirements for Admission:

Students may prepare for nursing admission by meeting the minimum program requirements outlined below. Students are responsible to submit 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.


### Year One

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 100, Fundamentals of Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURS 110, Fundamentals Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NURS 196, Professional Development I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 200, Advanced Nursing Concepts I</td>
<td>7</td>
</tr>
<tr>
<td>NURS 210, Practicum III</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Year Three

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 201, Advanced Nursing Concepts II</td>
<td>6</td>
</tr>
<tr>
<td>NURS 211, Practicum IV</td>
<td>6</td>
</tr>
<tr>
<td>NURS 232, Professional Development III</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Total Credits: 32**

### Associate Degree Nursing (ADN)

This degree utilizes the nursing process to provide and/or supervise client care while maintaining responsibility and accountability for the quality of nursing care provided in complex and varied situations. Graduates who complete the ADN program are eligible to take the National Council Licensure Examination (NCLEX-RN) for Registered Nursing. If successful, they are licensed as Registered Nurses (RN). Please note: Beginning with the entering class of Fall, 2014, the ADN will be replaced by the AAS-T Nursing degree. See requirements above.

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

#### Degree Outcomes:

- Demonstrate critical thinking in the use of the nursing process.
- Demonstrate use of management/leadership principles in the delivery of client care.
- Perform interventions in a safe and effective manner.
- Use therapeutic communication.
- Demonstrate professional behaviors.

#### Program Requirements for Admission:

Students may prepare for nursing admission by meeting the minimum program requirements outlined below. Students are responsible to submit high school and/or college transcripts to WWCC’s Office of Admissions along with a Transcript Evaluation Center, or one of Biology 160 General Biology w/ Lab. Grade must be 2.0 (C) or better.

- Mathematics: Completion of Math 201, Introduction to Statistics. Grade must be 2.0 (C) or better.
- Biology: Eligible to enter Biology 251 (Human Anatomy & Physiology I), or completion of Biology 160 General Biology w/ Lab. Grade must be 2.0 (C) or better.
- English: Eligible to enter English 101 (Composition) based on:
- Placement Tests offered by WWCC’s Student Development Center, or
- Completion of pre-requisite college coursework.

#### Other Information:

It is highly recommended that as many as possible of the pre-requisite and support courses listed below be completed prior to the application deadline in order to achieve the highest possible points toward admission. A Nursing Assistant course and proof of passing the State Exam must be submitted prior to entering the Nursing program. Courses MUST be completed by the following timeline:

#### Prior to Entering the Nursing Program: Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 251, Human A &amp; P I</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL&amp; 252, Human A &amp; P II</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL&amp; 260, Microbiology</td>
<td>.5</td>
</tr>
<tr>
<td>CHEM&amp;110, Chemical Concepts w/ Lab or</td>
<td>.5</td>
</tr>
<tr>
<td>CHEM&amp;121, Intro to Chemistry</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 201, Introduction to Statistics</td>
<td>.5</td>
</tr>
</tbody>
</table>

#### BEFORE THE END OF FIRST YEAR (Support Courses): Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp; 100, General Psychology</td>
<td>.5</td>
</tr>
<tr>
<td>(by the end of fall quarter)</td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 200, Lifespan Psychology</td>
<td>.5</td>
</tr>
<tr>
<td>(by the end of winter quarter)</td>
<td></td>
</tr>
<tr>
<td>NUTR&amp; 101, Nutrition</td>
<td>.5</td>
</tr>
<tr>
<td>(by the end of spring quarter)</td>
<td></td>
</tr>
</tbody>
</table>

#### BEFORE THE END OF WINTER QUARTER, Second Year (Support Courses): Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 102, Interpersonal Comm. or</td>
<td>.3</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking or</td>
<td></td>
</tr>
<tr>
<td>CMST 201, Intercultural Comm.</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS: 48**

The following Nursing courses must be completed after being admitted into the Nursing Program.

**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**
Request form. GPA requirements: 2.0 for all college level classes.

Pre-requisites:
The following competencies and/or courses MUST be completed prior to the April 15 application deadline. Applicants who have not completed the Chemistry, Math, Biology and English competency levels will not be admitted during the first round of application review and admissions.

- Chemistry: Completion of a five credit college level introductory chemistry course with a lab. Grade must be 2.0 (C) or better.
- Mathematics: Completion of Math 095 (Intermediate Algebra) with a C- grade or better, or eligible to enter Math 201 (Introduction to Statistics). Please Note: Beginning in 2014, the Nursing Program will require Math 201 (Introduction to Statistics) as a pre-requisite.
- Biology: Eligible to enter Biology 251 (Human Anatomy & Physiology I), or completion of Biology 160 General Biology w/ Lab. Grade must be 2.0 (C) or better.
- English: Eligible to enter English 101 (Composition) based on:
- Placement Tests offered by WWCC’s Student Development Center, or
- Completion of pre-requisite college coursework.

Other Information: It is highly recommended that as many as possible of the pre-requisite courses listed below be completed prior to the application deadline in order to achieve the highest possible points toward admission. A Nursing Assistant course and proof of passing the State Exam must be submitted prior to entering the Nursing program. Courses MUST be completed by the following timeline:

PRIOR TO ENTERING THE NURSING PROGRAM: Credits
BIOL 251, Human A & P I ........................................... 5
BIOL 252, Human A & P II ........................................... 5
BIOL 260, Microbiology ............................................ 5
ENGL 101, English Composition ............................... 5

BEFORE THE END OF FIRST YEAR (Support Courses): Credits
PSYC 100, General Psychology .................................. 5
(by the end of fall quarter)
PSYC 200, Lifespan Psychology .................................. 5
(by the end of winter quarter)
NUTR 101, Nutrition .............................................. 5
(by the end of spring quarter)

BEFORE THE END OF WINTER QUARTER, SECOND YEAR (Support Courses): Credits
CMST 102, Interpersonal Comm or ............................... 3
CMST 220, Public Speaking or
CMST 201, Intercultural Comm

TOTAL CREDITS: ........................................ 43

[includes Chemistry pre-requisite]
The following Associate Degree Nursing courses must be completed after being admitted into the Nursing Program.
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.

**Entrance Requirements:** A placement test offered by the Student Development Center must be completed prior to enrolling in OCSUP courses.

### Oceanography

[Program available at/via: Walla Walla]

**Department Overview:** Oceanography is the study of the world’s oceans and coastal waters. More specifically it is the study of motion and circulation of the ocean waters; the physical and chemical properties of the oceans; and how these properties affect coastal areas, climate, and weather.

**Program Level Outcomes:**

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

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

**Preparation for Success:** Students interested in a major in Oceanography should take courses in natural sciences, with an emphasis on biology, chemistry and geology. The ability to utilize computers is also essential.

### Office Technology

#### AAAS, CERT

**http://wwcc.edu/office**

**Krista Mahan** 509.527.4233 krista.mahan@wwcc.edu

**Linda Lane-Clarkston** 509.758.1724 linda.lane@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston] [Online (partial)]

**Department Overview:** Office Technology provides training that integrates career related subject knowledge with computer applications pertinent to today’s automated office. Today’s office worker encounters an interesting mixture of work, realizes regularly increasing responsibility, and often finds opportunity for advancement. Part-time and full-time employment opportunities are available in a variety of office settings and locations. Taught through a combination of lecture, lab and cooperative training opportunities, Office Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**

- Program graduates 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, with benefits.

**Degrees:** Students may earn an Associate in Applied Arts and Sciences Degree in each of four key areas of office technology: Administrative Office Professional, Legal Administrative Assistant or Medical Administrative Assistant. Certificates in: Office Assistant, Legal Administrative Assistant, Medical Billing Specialist and Medical Transcription are also available.

**Industry Description:** As the reliance on technology continues to expand in offices across the nation, the role of the office professional continues to evolve. Office automation and organizational restructuring have led administrative assistants to assume a wider range of responsibilities once reserved for managerial and professional staff. Administrative assistants are responsible for a variety of administrative and clerical duties necessary to run an organization efficiently. They serve as an information manager for an office, plan and schedule meetings and appointments, organize and maintain paper and electronic files, manage projects, conduct research, and provide information by using the telephone, postal mail, and e-mail. Medical assistants perform many administrative duties, including answering telephones, greeting patients, updating and filing patients’ medical records, filling out insurance forms, handling correspondence, scheduling appointments, arranging for hospital admission and laboratory services, and handling billing and bookkeeping.

**Entrance Requirements:** Students may begin their study in these programs in fall, winter or spring quarters. However, due
OFFICE TECHNOLOGY

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

Degrees

Associate in Applied Arts and Sciences Degree in Administrative Office Professional

This technical degree prepares the student for immediate employment in an executive administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the business setting.

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

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></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</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>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td>Credits</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
<tr>
<td>OT 124, Office Procedures</td>
<td>5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td>OT 222, Records and Database Management</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
<tr>
<td>Quarter Three</td>
<td>Credits</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 192, Business Leadership Seminar I (J)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>13</td>
</tr>
<tr>
<td>Year One Total</td>
<td>47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR TWO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I*</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>5</td>
</tr>
<tr>
<td>OT 126, Advanced Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td>Credits</td>
</tr>
<tr>
<td>ACCT 115, Integrated Computer Applications for Accounting</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 201, Business Law I</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>13-15</td>
</tr>
<tr>
<td>Quarter Three</td>
<td>Credits</td>
</tr>
<tr>
<td>CS 222, Desktop Publishing (InDesign)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (L)</td>
<td>3</td>
</tr>
</tbody>
</table>

EPC: 547

* ACCT& 201, Principles of Accounting or OT 161, Practical Accounting meet the accounting requirement for this degree.

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

(J) - BUS 192
(W) - BUS 137
(L) - BUS 292
(M) - BUS 112
(O) - CMST 102, CMST& 220
(R) - BUS 157, PSYC& 100
(J) - Job Seeking Skills
(L) - Leadership
(M) - Computation/Mathematics
(O) - Oral Communications
(W) -Written Communications

Associate in Applied Arts and Sciences Degree in Medical Administrative Assistant

This technical degree prepares the student for immediate employment in a medical administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the medical office setting.

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

Degree Outcomes:

• Demonstrate technical knowledge to perform general office skills proficiently.
• Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
• Perform duties related to specialty content of study, i.e. medical emphasis.
• Project ethical work habits to model professional behavior in the workplace.
• Develop critical-thinking and problem-solving abilities.
• Function effectively as a team member by applying positive interpersonal interactions.

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></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td>Credits</td>
</tr>
<tr>
<td>BUS 136, Business Communications I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
</tbody>
</table>

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
The AAAS Degree is designed for students current skills and knowledge in the legal office setting.

**Degree Outcomes:**
- Demonstrate technical knowledge to perform general office skills proficiently.
- Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
- Perform duties related to specialty content of study, i.e. legal emphasis.
- Project ethical work habits to model professional behavior in the workplace.
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.

**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.

---

**OFFICE TECHNOLOGY**

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 192, Business Leadership Seminar I (J)</td>
<td>3</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td>OT 234, Medical Coding</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Grand Total**

**Year One Total**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I *</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>5</td>
</tr>
<tr>
<td>OT 126, Advanced Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>43-47</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>96-100</strong></td>
</tr>
</tbody>
</table>

EPC: 565

* ACCT& 201, Principles of Accounting or OT 161, Practical Accounting meet the accounting requirement for this degree.

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

(J) - BUS 192
(W) - BUS 137
(L) - BUS 292
(M) - BUS 112
(O) - CMST 102, CMST & 220
(R) - BUS 157, PSYC& 100

- Job Seeking Skills
- Leadership Skills
- Computer/Mathematics
- Oral Communications
- Written Communications
- Human Relations

---

### Degrees

**Associate in Applied Arts and Sciences Degree in Legal Administrative Assistant**

This technical degree prepares the student for immediate employment in a legal administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the legal office setting.

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

**Degree Outcomes:**

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>5</td>
</tr>
<tr>
<td>OT 122, Records Management</td>
<td>5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td>OT 218, Desktop Calculator</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Year Two**

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I *</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>OT 126, Advanced Word Processing Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Year One Total**

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</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>CMST 102, Interpersonal Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>OT 222, Records and Database Management</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>43-46</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>101-104</strong></td>
</tr>
</tbody>
</table>

EPC: 577

* ACCT& 201, Principles of Accounting or OT 161, Practical Accounting meet the accounting requirement for this degree.

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

(J) - BUS 292

---

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

Legal Administrative Assistant Certificate
This certificate provides the basic skills for employment in a legal administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the legal office setting.

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

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 122, Records Management</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>BUS 136, Business Communications I (W)</td>
<td>. . . 5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>. . . 5</td>
</tr>
<tr>
<td>BUS 217, Computer Software Applications</td>
<td>. . . 5</td>
</tr>
<tr>
<td>BUS&amp; 201, Business Law I</td>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 20</td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 126, Advanced Word Processing Applications</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 161, Practical Accounting</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 228, Legal Terminology</td>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 20</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td>. . . 55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR TWO</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>BUS 291, Cooperative Work Experience II</td>
<td>. . . 2-5</td>
</tr>
<tr>
<td>BUS 192, Business Leadership Seminar I</td>
<td>. . . 3</td>
</tr>
<tr>
<td>OT 229, Legal Document Processing</td>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 10-13</td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td>. . . 10-13</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>. . . 65-68</td>
</tr>
</tbody>
</table>

EPC: 577C
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(W) - BUS 136
(M) - BUS 112
(R) - BUS 157
(J) - Job Seeking Skills
(M) - Computation/Mathematics
(W) - Written Communications
(L) - Leadership
(O) - Oral Communications
(R) - Human Relations

Office Assistant Certificate
An Office Assistant will assist in the clerical operation of the office by transcribing and keying letters, reports, and other business correspondence. Other duties may include records management, office machine calculations, basic bookkeeping, and word processing. An Office Assistant must display good communication and interpersonal skills.

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

Degree Outcomes:
- Demonstrate technical knowledge to perform general office skills proficiently.
- Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
- Perform duties related to specialty content of study as an office assistant.
- Project ethical work habits to model professional behavior in the workplace.
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</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>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 15</td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 124, Office Procedures</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>. . . 5</td>
</tr>
<tr>
<td>OT 222, Records and Database Management</td>
<td>. . . 5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 20</td>
</tr>
<tr>
<td>Quarter Three</td>
<td></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 192, Business Leadership Seminar I (J)</td>
<td>. . . 3</td>
</tr>
<tr>
<td>BUS 291, Cooperative Work Experience III</td>
<td>. . . 2-5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>. . . 15-18</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td>. . . 50-53</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>. . . 50-53</td>
</tr>
</tbody>
</table>

EPC: 559C
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(J) - BUS 192
(W) - BUS 137
(M) - BUS 112
(R) - BUS 157, PSYC& 100
(J) - Job Seeking Skills
(M) - Computation/Mathematics
(W) - Written Communications
(L) - Leadership
(O) - Oral Communications
(R) - Human Relations

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
## Medical Billing Specialist Certificate

This certificate provides the basic skills for employment in a medical administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the medical office setting.

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

### Degree Outcomes:
- Demonstrate technical knowledge to perform general office skills proficiently.
- Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
- Perform duties related to specialty content of study as a medical billing and coding specialist.
- Project ethical work habits to model professional behavior in the workplace.
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.

### Year One

#### Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Intro to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

#### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201, Principles of Accounting I</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 136, Business Communications I</td>
<td>.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 222, Records and Data Base Management</td>
<td>.5</td>
</tr>
<tr>
<td>OT 232, Medical Insurance Procedures</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

#### Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 291, Cooperative Work Experience III</td>
<td>.2 - .5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar I (L)</td>
<td>.3</td>
</tr>
<tr>
<td>OT 126, Advanced Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 281, Medical Terminology II</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15-17</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | **50-52**

**Grand Total** | **50-52**

### Year Two

#### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

#### Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 116, Medical Transcription II</td>
<td>.5</td>
</tr>
<tr>
<td>OT 281, Medical Terminology II</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

#### Quarter Four

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT 281, Medical Terminology II</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | **60-63**

**Grand Total** | **60-63**

### Degree Outcomes:
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.
- Project ethical work habits to model professional behavior in the workplace.
- Perform duties related to specialty content of study as a medical transcriptionist.
- Demonstrate technical knowledge to perform general office skills proficiently.

### Certificates

#### Medical Billing Specialist Certificate

#### Medical Transcription Certificate

This certificate provides the basic skills for employment in a medical administrative environment. The coursework is also appropriate for individuals interested in improving their current skills and knowledge in the medical office setting.

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

### Degree Outcomes:
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.
- Demonstrate technical knowledge to perform general office skills proficiently.
- Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
- Perform duties related to specialty content of study as a medical transcriptionist.
- Project ethical work habits to model professional behavior in the workplace.

#### Year One

#### Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>.5</td>
</tr>
<tr>
<td>OT 116, Medical Transcription II</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 157, Business Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

#### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>.5</td>
</tr>
<tr>
<td>OT 116, Medical Transcription II</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 157, Business Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

#### Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157, Business Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>OT 116, Medical Transcription II</td>
<td>.5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 157, Business Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>OT 125, Word Processing Applications</td>
<td>.5</td>
</tr>
<tr>
<td>OT 231, Medical Office Procedures</td>
<td>.5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | **60-63**

**Grand Total** | **60-63**

### Certificates

#### Medical Transcription Certificate

### Degree Outcomes:
- Develop critical-thinking and problem-solving abilities.
- Function effectively as a team member by applying positive interpersonal interactions.
- Demonstrate technical knowledge to perform general office skills proficiently.
- Demonstrate an ability to use appropriate software to complete business related tasks and requirements.
- Perform duties related to specialty content of study as a medical transcriptionist.
- Project ethical work habits to model professional behavior in the workplace.
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 outfits, 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.wtb.wa.gov/etp.

### Degrees

#### 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 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

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 154, Basic 4-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>TST 151, Shop Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 156, Electrical Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 105, Intro to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td>TST 159, Generator Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 158, Power Trains</td>
<td>10</td>
</tr>
<tr>
<td>TST 125, Paints and Painting</td>
<td>3</td>
</tr>
<tr>
<td>TST 157, Hydraulics</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

**Year One Total**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 151, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>TST 155, Basic 2-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>TST 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>TST 256, Reels and Mowing Systems</td>
<td>17</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 102, Customer Service (R)</td>
<td>5</td>
</tr>
<tr>
<td>TST 255, Compact Diesel Engines</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>56</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

EPC: 126

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>
</tr>
</thead>
<tbody>
<tr>
<td>(J) - AGPR 100, OCSUP 103, PSYC 140</td>
<td></td>
</tr>
<tr>
<td>(W) - BUS 137, ENGL 101, WRITE 100</td>
<td></td>
</tr>
<tr>
<td>(L) - CLS 180, OCSUP 299, TST 299</td>
<td></td>
</tr>
<tr>
<td>(M) - BUS 112, OCSUP 106</td>
<td></td>
</tr>
<tr>
<td>(O) - CMST 102, CMST 220, OCSUP 102</td>
<td></td>
</tr>
<tr>
<td>(R) - BUS 102, OCSUP 101, PSYC 111, PSYC 100</td>
<td></td>
</tr>
<tr>
<td>(J) - Job Seeking Skills</td>
<td></td>
</tr>
<tr>
<td>(M) - Computation/Mathematics</td>
<td></td>
</tr>
<tr>
<td>(W) - Written Communications</td>
<td></td>
</tr>
<tr>
<td>(L) - Leadership</td>
<td></td>
</tr>
<tr>
<td>(O) - Oral Communications</td>
<td></td>
</tr>
<tr>
<td>(R) - Human Relations</td>
<td></td>
</tr>
</tbody>
</table>

### Year Two

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 154, Basic 4-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>TST 151, Shop Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 156, Electrical Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td>TST 159, Generator Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 158, Power Trains</td>
<td>10</td>
</tr>
<tr>
<td>TST 157, Hydraulics</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>TST 125, Paints and Painting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>

### Year Two

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 155, Basic 2-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>TST 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 156, Electrical Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td>TST 159, Generator Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 158, Power Trains</td>
<td>10</td>
</tr>
<tr>
<td>TST 157, Hydraulics</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>TST 125, Paints and Painting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>

**Grand Total**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 155, Basic 2-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>TST 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>82</strong></td>
</tr>
</tbody>
</table>

### Certificates

**Outdoor Power Equipment Certificate**

Students may earn a Certificate as an Outdoor Power and Turf Equipment Technician upon completion of four quarters of course instruction. This certificate is taught via web-based learning and either on or off campus lab. This certificate allows students to acquire the master competencies to complete five EETC Certification Tests.

**Degree available at/via:** [Walla Walla] [Online (full)]

**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.
- 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.

**FOR THE MOST CURRENT INFORMATION SEE:** WWW.WWCC.EDU
Philosophy courses ask fundamental questions about how we can improve our thinking, our moral and political values, and our understanding of life. Philosophy courses examine great ideas from the past as well as contemporary thinkers.

Program Level Outcomes:
- Demonstrates a comprehension of culturally diverse works in literature and philosophy.
- Demonstrates an understanding and working knowledge of terminology commonly used in the humanities.
- Demonstrates 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: Students who plan to major in philosophy at the four year college or university should take all of the Philosophy courses offered at WWCC, including Symbolic Logic. The great majority of schools require at least two years of a language other than English for a Bachelor of Arts in Philosophy.

Physics

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.

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

**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.

• Student's 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.

**Degrees**

**Associate in Science Degree - Option II (Physics)**

Recommended two-year schedule (Option II). For other degree information, students should check with their advisors, transfer center staff, and college degree guidelines. Students should also note that it is extremely important to begin sequential courses in the fall since those courses are typically offered one quarter per year.

**Transferability:** For transfer information at specific institutions and/or programs consult with your advisor.

**Year One**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEME 161, General Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>MATH&amp; 141, Precalculus I or approved elective</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 142, Precalculus II or approved elective</td>
<td>5</td>
</tr>
</tbody>
</table>

**Year Two**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151, Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201, Physics for Science and Engineering I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities or Social Science Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152, Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 202, Physics for Science and Engineering II</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153, Calculus III or MATH 201, Statistics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 203, Physics for Science and Engineering III</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Year Two Total</td>
<td><strong>46</strong></td>
</tr>
<tr>
<td>Grand Total</td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

**Plant Operations**

**AAAS**
Jason Selwitz  509.527.3678  jason.selwitz@wwcc.edu
http://www.wwcc.edu/plantoperations

**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 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU 151
• 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.

Degrees: Plant Operations courses cover safety standards, electricity principles, equipment, processes, controls, fluid dynamics, and other key scientific concepts utilized in the bioenergy, processing, and manufacturing industries. WWCC offers the following degree options in collaboration with Pacific Northwest Community and Technical Colleges:

• Associate in Applied Arts and Sciences (AAAS) degree in Bioenergy Operations
• Bioenergy Operations Certificate issued after completion of year one courses.
• Associate in Science (Option I: Life Sciences) transfer degree with emphasis in Bioenergy Operations

This degree will articulate to specified four-year institutions.

Industry Description: Through a number of regulatory and market forces, the Bioenergy industry in the Pacific Northwest is emerging to help revitalize rural economies. The Bioenergy industry is establishing decent living wage local jobs that cannot be moved overseas, provide energy security by harnessing domestic renewable resources, address the need to reduce/sequester carbon emissions from fossil fuels, and meet regulatory requirements under the Clean Air Act, Clean Water Act, Renewable Portfolio Standard, Renewable Fuel Standard, and similar state and federal legislated guidelines.

Other Information: Core Bioenergy courses are offered online via Walla Walla Community College. Lab requirements for each course include participation in at least one 8-hour lab intensive on a TBD Saturday (per course). Supporting courses consist of existing courses at collaborating Community and Technical Colleges, as agreed upon via MOU between Walla Walla Community College and each participating institution.

---

Associate in Applied Arts and Sciences
Degree in Plant Operations

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

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.

### Degree Outcomes:

**Bioenergy Operations Certificate**

- 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.

### Degrees

#### Year One

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100</td>
<td>Orientation to Agriculture (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 100</td>
<td>Refrigeration &amp; Air Conditioning Basics I</td>
<td>5</td>
</tr>
<tr>
<td>EST 104</td>
<td>Introduction to Bioenergy*</td>
<td>2</td>
</tr>
<tr>
<td>EST 131</td>
<td>Principles of Electricity Theory</td>
<td>5</td>
</tr>
<tr>
<td>EST 144</td>
<td>Industrial Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>18.4</td>
</tr>
</tbody>
</table>

#### Year Two

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 105</td>
<td>Process Support Systems*</td>
<td>3</td>
</tr>
<tr>
<td>EST 132</td>
<td>Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 087</td>
<td>Writing Essentials (W)</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022</td>
<td>Medic First Aid Basic</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 107</td>
<td>Intro to Technical Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>18.4</td>
</tr>
</tbody>
</table>

#### Year Three

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 102</td>
<td>Interpersonal Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>EST 106</td>
<td>Plant Equipment and Controls*</td>
<td>3</td>
</tr>
</tbody>
</table>

---

**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**
EST 133, Introduction to Controls .................. 5
WTM 190, Water Quality and Environmental Chem. .... 5
Total Credits .................. 16

**Quarter Four**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 191, Cooperative Work Experience*</td>
<td>10</td>
</tr>
<tr>
<td>EST 292, Cooperative Seminar II* (L)</td>
<td>2</td>
</tr>
<tr>
<td>Total Credits</td>
<td>12</td>
</tr>
<tr>
<td>Year One Total</td>
<td>64.4</td>
</tr>
</tbody>
</table>

**YEAR TWO**

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 211, Majors Cellular**</td>
<td>5</td>
</tr>
<tr>
<td>ENT 211, Hydraulics.</td>
<td>5</td>
</tr>
<tr>
<td>EST 201, Plant Operations*</td>
<td>4</td>
</tr>
<tr>
<td>WTM 35, Cultures of Water (R )</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>19</td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 121, Biomass Feedstock Management***</td>
<td>3</td>
</tr>
<tr>
<td>EST 202, Bio-Chemical Conversion*</td>
<td>5</td>
</tr>
<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
<td>5</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 165, Rigging, Equipment Oper &amp; Mat Handl.</td>
<td>5</td>
</tr>
<tr>
<td>EST 203, Thermo-Chemical Conversion**</td>
<td>5</td>
</tr>
<tr>
<td>Year Two Total</td>
<td>10</td>
</tr>
<tr>
<td>Grand Total</td>
<td>45</td>
</tr>
<tr>
<td>Total Credits</td>
<td>109.4</td>
</tr>
</tbody>
</table>

EPC: 177A

* Asterisked courses are online with hands-on labs and projects.
** BIOL& 100 Survey of Biology (or greater) is okay, but not preferred. Only BIOL& 211, Majors Cellular is transferrable.
*** AGPR 121 is highly recommended but not required. An advisor-approved elective is acceptable.

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

- (J) - AGPR 100
- (L) - EST 292
- (M) - OCSUP 107
- (O) - CMST 102
- (R) - WTM 135
- (W) - ENGL 087
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (W) - Written Communications

**Political Science**

http://wwcc.edu/politicalscience

Jim Peitersen 509.527.4601 james.peitersen@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

**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**

AAAS, CERT

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.
- Provide relevant training through hands-on and field experience to prepare the students for the demands of the golf industry.
- Develop analytical thinking and problem-solving abilities through golf specific instructional labs, projects, and testing.
- Provide training in environmental and work place safety that meets or exceeds industry standards.
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.wtb.wa.gov/etp.

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.
- Identify basic principles of a food and beverage department.
- 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>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>PGM 101, Golf Management I</td>
<td>5</td>
</tr>
<tr>
<td>PGM 111, Introductory Golf Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PGM 121, Rules of Golf I</td>
<td>3</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications *</td>
<td>5</td>
</tr>
<tr>
<td>PGM 102, Golf Management II</td>
<td>5</td>
</tr>
<tr>
<td>PGM 112, Intermediate Golf Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PGM 131, Golf Car Fleet Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGM 191, Cooperative Work Experience</td>
<td>18</td>
</tr>
<tr>
<td>PGM 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGM 291, Cooperative Work Experience II</td>
<td>18</td>
</tr>
<tr>
<td>PGM 292, Cooperative Seminar II (L)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
</tr>
<tr>
<td>PGM 201, Golf Management III</td>
<td>5</td>
</tr>
<tr>
<td>PGM 211, Corrective Golf Lessons</td>
<td>3</td>
</tr>
<tr>
<td>PGM 221, Rules of Golf II</td>
<td>2</td>
</tr>
<tr>
<td>TURF 122, Turf Maintenance Practices</td>
<td>3</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202, Principles of Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>PGM 202, Golf Management IV</td>
<td>5</td>
</tr>
<tr>
<td>PGM 212, Teaching the Advanced Player</td>
<td>2</td>
</tr>
<tr>
<td>TURF 211, Turf Management</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>38</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>

EPC: 176

* 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
- (W) - BUS 137, ENGL 097, ENGL& 101, WRITE 100
- (L) - PGM 292, PGM 299
- (M) - BUS 112, MATH 072B, OCSUP 106
- (O) - CMST 102, CMST& 220, OCSUP 102
- (R) - PGM 192
- (J) - Job Seeking Skills
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (L) - Leadership
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications

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

### Professional Golf Management Certificate

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

**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.
- Work closely with golf course maintenance staff.

### Year One

**Quarter One**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>PGM 101, Golf Management I</td>
<td>5</td>
</tr>
<tr>
<td>PGM 111, Introductory Golf Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PGM 121, Rules of Golf I</td>
<td>3</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications *</td>
<td>5</td>
</tr>
<tr>
<td>PGM 102, Golf Management II</td>
<td>5</td>
</tr>
<tr>
<td>PGM 112, Intermediate Golf Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PGM 131, Golf Car Fleet Management</td>
<td>3</td>
</tr>
<tr>
<td>WTM 110, Residential Irrigation Design, Installation and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Quarter Three**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGM 191, Cooperative Work Experience</td>
<td>18</td>
</tr>
<tr>
<td>PGM 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>66</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>

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
- **(M)** - BUS 112, MATH 072B, OCSUP 106
- **(R)** - PGM 192
- **(J)** - Job Seeking Skills
- **(L)** - Leadership
- **(M)** - Computation/Mathematics
- **(O)** - Oral Communications
- **(W)** - Written Communications
- **(R)** - Human 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 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.

### Quest Program

- [http://wwcc.edu/quest](http://wwcc.edu/quest)
- Jodi Worden 509.527.4561 jodi.worden@wwcc.edu
- Staci Simmelink-Johnson 509.527.4298 staci.simmelink-johnson@wwcc.edu
- Cindy Stevenson-McClure 509.527.4332 cindy.stevenson@wwcc.edu

### Department Overview:
- Quest is a membership-driven institute that encourages learning, socializing, and active participation in classes and activities. It is one of over 300 college-sponsored institutes for learning in retirement in the US and Canada affiliated with road scholar of Elderhostel, Inc. 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 (for 50+).
Industry Description: Quest is a membership driven institute that encourages learning, socializing, and active participation in classes and activities.

Reading

http://www.wwcc.edu/reading
Karen Kirkwood 509.524.5143  karen.kirkwood@wwcc.edu
Program available at/via: [Walla Walla] [Clarkston]

Department Overview: Reading courses provide students with the opportunity to improve their reading skills. The courses offered are college preparation courses designed to prepare students for academic and occupational success.

The number of quarters required to complete the college preparation coursework is dependent upon the individuals’ entrance examination scores.

Science

http://www.wwcc.edu/science
Jill Emigh 509.527.4558  jill.emigh@wwcc.edu

Department Overview: Science courses provide an environment that assists students in learning and practicing skills that lead to academic and occupational success. Courses include thinking and learning strategies to prepare students to succeed in college-level science courses. Students who complete Science courses normally experience higher skill achievement.

Program Level Outcomes:

- To offer a variety of introductory science classes which fulfill the necessary Natural Science graduation requirements for all AA transfer students.
- To assist non-science majors in becoming more scientifically literate.
- To provide science majors with the foundation knowledge they will need in order to successfully continue on to upper level courses at a transfer institution.
- To offer comprehensive sequences of lower division science classes in a variety disciplines which provide science majors with a solid one or two years of preparation in their chosen field comparable to what they would receive in the first two years as a resident student at a transfer institution.
- To provide pre-professional (nursing, dentistry, optometry, physical therapy, etc.) students with the first two years of course work necessary for entrance in most Allied Health related programs.

Sociology

http://www.wwcc.edu/sociology
Susan Palmer 509.527.4545  susan.palmer@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [Online (partial)]

Department Overview: Most of us have a basic idea about how houses or transportation systems are built, but little knowledge, beyond common sense, about how societies are constructed.

Sociology systematically examines the architecture of our social world and our everyday interactions.

Sociology provides a framework to understand how societies, and social life in general, are created, maintained, and changed. Students of sociology gain an appreciation of why it is that we do things one way, while other cultures do things differently. Topics and issues in Sociology include: family, gender, race and ethnicity, human ecology, community, religion, government, globalization, social problems, social deviance, social welfare, social change and social stratification.

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 Sociology is strengthened by studies in history, research and statistics.

Spanish

http://wwcc.edu/spanish
Jeff Adams 509.527.4644  jeff.adams@wwcc.edu

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

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:

- 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: 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

AAAS, AAS-T, CERT

http://wwcc.edu/turfmanagement

Gwen Stahnke 509.527.4269 gwen.stahnke@wwcc.edu

Program available at/via: [Walla Walla] [Online (full)]

Department Overview: Turf Management focuses on equipment operation and maintenance, irrigation system installation, repair and maintenance, and turf grass application, installation, and management. Two quarters of internship work experience combine classroom instruction with field experience to provide direct application of coursework. Many courses are offered via distance learning. Graduates of this program may find employment as assistant golf course superintendents, assistant sports turf managers, landscape maintenance and construction crew supervisors, parks department grounds keepers, and school district groundskeepers. 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 groundskeepers, 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.wtb.wa.gov/etp.

Degrees

Associate in Applied Arts and Sciences Degree in Turf Management

This technical degree prepares the student with the practical knowledge and experience necessary join the turf maintenance industry in a number of entry-level or mid-level positions, and will have obtained the technical advantage with which the individual may moving quickly to mid-management positions within the industry.

Degree available at/via: [Walla Walla] [Online (full)]

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

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations</td>
<td>3</td>
</tr>
<tr>
<td>TURF 122, Turf Maintenance Practices</td>
<td>3</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing</td>
<td>5</td>
</tr>
<tr>
<td>TURF 215, Turf Diseases and Insects</td>
<td>3</td>
</tr>
<tr>
<td>WTM 110, Residential Irrigation Design, Installation and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURF 191, Cooperative Work Experience</td>
<td>10</td>
</tr>
<tr>
<td>TURF 192, Cooperative Seminar</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURF 291, Cooperative Work Experience II</td>
<td>6 - 10</td>
</tr>
<tr>
<td>TURF 292, Cooperative Seminar II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>60-64</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>TURF 201, Turfgrass Cultural Practices</td>
<td>6</td>
</tr>
<tr>
<td>TURF 221, Landscape Maintenance and Construction</td>
<td>3</td>
</tr>
<tr>
<td>TURF 252, Turf Equipment Maintenance and Repair</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20-22</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
</tr>
<tr>
<td>TURF 211, Turf Management</td>
<td>5</td>
</tr>
<tr>
<td>WTM 225, Advanced Irrigation Design</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>39-41</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>99-105</strong></td>
</tr>
</tbody>
</table>

EPC: 160

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

(J) - AGPR 100, PSYC 140
(W) - ENGL 097, ENGL 101
(L) - TURF 292
(M) - MATH 074C, OCSUP 107
(O) - CMST 102, CMST& 220
(R) - TURF 192

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

---

**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 Turf Grass Management at Washington State University.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121 or CHEM&amp; 161</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 122 or CHEM&amp; 162</td>
<td>5</td>
</tr>
<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 221, Agricultural Marketing</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 123 or CHEM&amp; 163</td>
<td>5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<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 Irrigation Controls and Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
<td>5</td>
</tr>
<tr>
<td>WTM 225, Advanced Irrigation Design</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 212, Majors Animal</td>
<td>5</td>
</tr>
<tr>
<td>TURF 191, Cooperative Work Experience</td>
<td>5</td>
</tr>
<tr>
<td>MATH 201, Introduction to Statistics</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>59</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>115</strong></td>
</tr>
</tbody>
</table>

EPC: 160T

---

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

158
WATER TECHNOLOGIES AND MANAGEMENT - IRRIGATION TECHNOLOGY

Certificates

Turf Management Certificate
This certificate is equivalent to the first three quarters of the AAAS Degree in Turf Management.

Degree available at/via: [Walla Walla] [Online (full)]

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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td>TURF 122, Turf Maintenance Practices</td>
<td>3</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>TURF 215, Turf Diseases and Insects</td>
<td>3</td>
</tr>
<tr>
<td>WTM 110, Residential Irrigation Design, Installation and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURF 191, Cooperative Work Experience</td>
<td>10</td>
</tr>
<tr>
<td>TURF 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURF 291, Cooperative Work Experience II</td>
<td>6 - 10</td>
</tr>
<tr>
<td>TURF 292, Cooperative Seminar II (L)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td>Year One Total</td>
<td>.60-64</td>
</tr>
<tr>
<td>Grand Total</td>
<td>.60-64</td>
</tr>
</tbody>
</table>

EPC: 160C
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- AGPR 100, PSYC 140
- ENGL 097, ENGL& 101
- TURF 292
- MATH 074C, OCSUP 107
- CMST 102, CMST& 220
- TURF 192
- Job Seeking Skills
- CMST 102, CMST& 220
- Written Communications
- TURF 292

Water Technologies and Management - Irrigation Technology

AAAS, CERT
http://wwcc.edu/water
Bill Loney 509.527.4250 william.loney@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

Department Overview: The Water Technologies and Management program offers several degree tracks for students which include Irrigation Technology and Water Resources Technology.

Irrigation Technology provides practical, cooperative learning experience in both the agriculture and the turf industries. The study of irrigation principles and practices, water and energy conservation, pumps, and fluid hydraulics, troubleshooting, and installation prepare students for 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.

Water Resources Technicians are skilled in planning, developing, managing and evaluating programs designed to protect and regulate natural habitats and natural resources. Technicians will have the skills necessary to analyze soil, plant, and water relationships; as well as understand water relationships to environment, economic, and sociological impacts to communities.

Students in the program have the unique opportunity to participate in a paid work experience in spring and summer quarters of the program. Some courses are offered via distance delivery.

The Water Management curriculum is reviewed annually by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Provide the irrigation and water resources technology industries with highly trained, fully employable, skilled technicians.
- Develop relationships and/or partnerships with existing irrigation and water resources organizations and institutions in the continuing education of industry practitioners.
- Provide industry work experience during the educational process, giving students exposure to the actual application of irrigation principles and practices.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
• 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. The Irrigation Technology degree prepares graduates for highly skilled entry-level positions within the industry and/or transferability to Washington State University. This provides students the flexibility to pursue a technical field of study with an option to continue their education and earn a Bachelor of Science degree. A Irrigation Technology Certificate is available upon completion of the first year of the program.

Students may earn an Associate in Applied Arts and Sciences Degree in Water Resources Technology upon completion of the two-year program of study.

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

---

### Degrees

#### 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] [Online (partial)]

**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

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>4</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory *</td>
<td>5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>20-22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 210, Agricultural Sales and Service</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td></td>
</tr>
<tr>
<td>WTM 110, Residential Irrigation Design, Installation and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>WTM 141, Center Pivot Troubleshooting</td>
<td>5</td>
</tr>
<tr>
<td>WTM 230, Water and Energy Conservation</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>19</td>
</tr>
</tbody>
</table>

---

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

This certificate is designed for students wanting to work in the Irrigation Service sector.

Degree available at/via: [Walla Walla]

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 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.

Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>4</td>
</tr>
<tr>
<td>WTM 220, Drip Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td>WTM 225, Advanced Irrigation Design</td>
<td>4</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20.4</td>
</tr>
<tr>
<td>Year One Total</td>
<td>40.4</td>
</tr>
<tr>
<td>Grand Total</td>
<td>94.4-105.4</td>
</tr>
</tbody>
</table>

Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>ENT 211, Hydraulics</td>
<td>5</td>
</tr>
<tr>
<td>WTM 241, Advanced Irrigation Controls and Applications</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
<tr>
<td>Year Two Total</td>
<td>40.4</td>
</tr>
<tr>
<td>Grand Total</td>
<td>94.4-105.4</td>
</tr>
</tbody>
</table>

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

- (W) - ENGL 097, ENGL& 101
- (L) - WTM 192
- (M) - MATH 074C, OCSUP 107
- (O) - CMST 102, CMST& 220
- (R) - WTM 192
- (J) - Job Seeking Skills
- (L) - Leadership
- (M) - Computation/Mathematics
- (O) - Oral Communications
- (W) - Written Communications
- (R) - Human Relations

Water Technologies and Management - Water Resources Technology

AAAS, AAS-T

http://www.wwcc.edu/water

Melissa Holecek  509.524.5208  melissa.holecek@wwcc.edu

Program available at/via: [Walla Walla] [Online (partial)]

Department Overview: The Water Technologies and Management program offers several degree tracks for students which include Irrigation Technology and Water Resources Technology.

Irrigation Technology provides practical, cooperative learning experience in both the agriculture and the turf industries. The study of irrigation principles and practices, water and energy

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
conservation, pumps, and fluid hydraulics, troubleshooting, and installation prepare students for 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.

Water Resources Technicians are skilled in planning, developing, managing and evaluating programs designed to protect and regulate natural habitats and natural resources. Technicians will have the skills necessary to analyze soil, plant, and water relationships; as well as understand water relationships to environment, economic, and sociological impacts to communities.

Students in the program have the unique opportunity to participate in a paid work experience in spring and summer quarters of the program. Some courses are offered via distance delivery.

The Water Management curriculum is reviewed annually by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Provide the irrigation and water resources technology industries with highly trained, fully employable, skilled technicians.
- Develop relationships and/or partnerships with existing irrigation and water resources organizations and institutions in the continuing education of industry practitioners.
- Provide industry work experience during the educational process, giving students exposure to the actual application of 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. The Irrigation Technology degree prepares graduates for highly skilled entry-level positions within the industry and/or transferability to Washington State University. This provides students the flexibility to pursue a technical field of study with an option to continue their education and earn a Bachelor of Science degree. A Irrigation Technology Certificate is available upon completion of the first year of the program.

Students may earn an Associate in Applied Arts and Sciences Degree in Water Resources Technology upon completion of the two-year program of study.

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

Degrees

Associate in Applied Arts and Sciences Degree in Water Resources Technology

This technical degree prepares the student for immediate employment in the water resources industry.

Degree available at/via: [Walla Walla] [Online (partial)]

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.
- Demonstrate competence with computer aided drafting software.
- Design basic drip systems.
- Analyze irrigation pumps and controls in relation to a complete irrigation system.
- Perform soil moisture measurements and water scheduling.
- Assess and design fish screens.
- Develop an understanding of water related cultural perspectives, views and opinions.
- Understand watershed processes and how they relate to the natural environment.
- Gain insight into western water law and policies which affect the use and non-use of water.
- Develop an awareness and understanding of fundamental elements of leadership, interpersonal communication, teamwork and collaborative problem solving.

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

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.3</td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 135, Cultures of Water</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>.4</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>WTM 110, Residential Irrigation Design, Installation and Troubleshooting</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 230, Water and Energy Conservation</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 103, Introduction to Precision Agriculture and Farm Management</td>
<td>.5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>.3 - .5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>.3</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16.4-18.4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTM 191, Cooperative Work Experience</td>
<td>6 - 10</td>
</tr>
<tr>
<td>WTM 292, Cooperative Seminar II (L)</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>58.4-64.4</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 211, Hydraulics</td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 204, Water Policy</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 241, Advanced Irrigation Controls and Applications</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<tr>
<td>WTM Elective*</td>
<td>3 - 5</td>
</tr>
<tr>
<td>WTM 220, Drip Irrigation</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 225, Advanced Irrigation Design</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18-20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>.5</td>
</tr>
<tr>
<td>Elective**</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>51-53</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>109.4-117.4</strong></td>
</tr>
</tbody>
</table>

EPC: 130A

* WTM Business Core Elective: AGRI 102, AGRI 108, AGRI 201, AGRI 210, AGRI 211, AGRI 221, CS 110, TURF 211
** Elective: WTM 190, AGPR 224, BIOL 130

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

- (J) - AGPR 100
- (W) - ENGL 097, ENGL 101
- (L) - WTM 292

(M) - MATH 074C, OCSUP 107
(O) - CMST 102, CMST& 220
(U) - Job Seeking Skills
(L) - Leadership
(M) - Computation/Mathematics
(O) - Oral Communications
(W) - Written Communications
(R) - Human Relations

### Degrees

**Associate of Applied Science-Transfer - Water Resources Technology**

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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</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, Cultures of Water</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 110, Introduction to 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>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>.5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<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 Irrigation Controls and Applications</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 225, Advanced Irrigation Design</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>.5</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL&amp; 212, Majors Animal</td>
<td>.5</td>
</tr>
<tr>
<td>MATH 201, Introduction to Statistics</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>57</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>

EPC: 130T

For the most current information see: www.wwcc.edu
Water Technologies and Management - Watershed Ecology

AAAS, CERT
http://www.wwcc.edu/watershedecology
Melissa Holecek 509.524.5208 melissa.holecek@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: 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 skills, and communication courses providing experience in working with individuals possessing different ecological values and cultural identities. This will prepare them for entry level employment and provide skill improvements for individuals already in the workforce.

Program Level Outcomes:
- Holistic approach towards ecosystems.
- Research and data collection methods.
- Applicable field experience.

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 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.

Degrees

Associated 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, analyze, and report data.
- Collect, recognize and identify aquatic organisms from invertebrate insects to fish species, relating 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.
- Have knowledge and understanding of Federal and State laws that pertain to water and 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.
- Ability to write reports and give presentations.
- Explain the relationships between soil, water and plants.

Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>.6</td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 135, Cultures of Water (R)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL 100, Survey of Biology</td>
<td>.5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>.5</td>
</tr>
<tr>
<td>WTM Elective*</td>
<td>.5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21-25</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>.5</td>
</tr>
<tr>
<td>BIOL 130, General Ecology</td>
<td>.5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>.4</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15.4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTM 191, Cooperative Work Experience</td>
<td>.6</td>
</tr>
<tr>
<td>WTM 292, Cooperative Seminar II (L)</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>62.4-70.4</strong></td>
</tr>
</tbody>
</table>

Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 120, Agricultural Chemistry</td>
<td>.5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 139, Watershed Management</td>
<td>.3</td>
</tr>
<tr>
<td>WTM 204, Water Policy</td>
<td>.3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td>WTM 230, Water and Energy Conservation</td>
<td>3</td>
</tr>
<tr>
<td>WTM 239, Watershed Processes and Restoration</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 224, Pasture &amp; Range Management</td>
<td>5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
<td>.5</td>
</tr>
<tr>
<td>WTM 229, Methods in Fish Biology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>51</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>113.4-121.4</strong></td>
</tr>
</tbody>
</table>

EPC: 165

- WTM Business Core Elective: AGRI 102, AGRI 108, AGRI 201, AGRI 219, AGRI 211, AGRI 221, CS 110, TURF 211

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

(J) - AGPR 100, PSYC 140  
(W) - ENGL 097, ENGL& 101  
(L) - WTM 292  
(M) - MATH 074C, OCSUP 107  
(O) - CMST 102, CMST& 220  
(R) - WTM 135  
(J) - Job Seeking Skills  
(M) - Computation/Mathematics  
(W) - Written Communications  
(L) - Leadership  
(O) - Oral Communications  
(R) - Human Relations

### Certificates

**Watershed Ecology Certificate**

This certificate is equivalent to the first year of the AAAS Degree in Watershed Ecology.

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

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Orientation to Agriculture (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113, Plant Anatomy and Morphology</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Cultures of Water (R)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 100, Survey of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220 or CMST 102 (O)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>WTM Elective*</td>
<td>3 - 5</td>
</tr>
<tr>
<td>OCSUP 107, Introduction to Technical Mathematics (M)</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21-25</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Health</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 130, General Ecology</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>4</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15.4</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>54.4-58.4</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>54.4-58.4</strong></td>
</tr>
</tbody>
</table>

EPC: (165C)

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

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

(J) - AGPR 100, PSYC 140  
(W) - ENGL 097, ENGL& 101  
(M) - MATH 074C, OCSUP 107  
(O) - CMST 102, CMST& 220  
(R) - WTM 135  
(J) - Job Seeking Skills  
(M) - Computation/Mathematics  
(W) - Written Communications  
(L) - Leadership  
(O) - Oral Communications  
(R) - Human Relations  

#### Welding Technology

**AAAS, CERT**

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

Michael Haggard  509.527.4219  michael.haggard@wwcc.edu

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

**Department Overview:** Welding Technology offers a certified, state-of-the-art welding facility complemented by certified welding instructors. Students train and learn to meet the current certification requirements of manufacturing and construction industries and exploring many career alternatives related to the welding industry. The program’s technical training complies with American Welding Society (AWS) S.E.N.S.E. standards, increases the students’ understanding of welding and the related science, meets employers’ expectations, and increases the students’ ability to compete in the employment marketplace. Training includes oxyacetylene cutting and welding, brazing, soldering, SMAW, GMAW, FCAW, GTAW, blueprint/layout standards and methods, welding procedure specifications, testing methods, quality control, metallurgy, and safe work practices. Welder certifications are conducted according to AWS/ASME and WABO (Washington Association of Building Officials) standards. Process certifications are available and include plate and pipe welding using shielded metal arc, gas metal arc, flux cored, and gas tungsten arc welding. The Welding Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**

- **Assure the Welding program is in full compliance with AWS/WABO standards and the needs of the metals welding industry.**
- **Upgrade welding curriculum relevance to employer technical needs in the region with assistance from the advisory committee.**
- **Enhance student enrollment, retention, and completion rates.**
- **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 proficiencies, students must pass certification tests prior to completion. Welding...
certifications include plate and pipe welding using shielded metal arc, gas metal arc, and gas tungsten arc welding processes. To meet the degree requirements, welding students must become certified in at least two processes, with at least one according to WABO Standards. A Welding Technology certificate is available upon completion of three specific welding courses and related instruction during the first year of instruction in the program.

**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.wtb.wa.gov/etp.

---

**Associate in Applied Arts and Sciences Degree in Welding Technology**

This technical degree trains the student according to American Welding Society (AWS) standards. Through completion of this degree, the student will have completed the Washington Association of Building Officials (WABO) certification. Students will be prepared to enter the welding, manufacturing and/or fabrication industry.

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

**Degree Outcomes:**

- Demonstrate welding mild steel, stainless steel and aluminum alloys using semi-automatic equipment/procedures.
- Perform welding visual inspection procedure to determine compliance with appropriate codes and standards.

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

---

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 151, Shielded Metal Arc Welding I</td>
<td>17</td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 152, Shielded Metal Arc Welding II</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 105, Intro. to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 153, Shielded Metal Arc Welding III</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>

### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 256, Gas Metal Arc Welding</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 255, Gas Tungsten Arc Welding</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 254, Shielded Metal Arc - Pipe</td>
<td>17</td>
</tr>
<tr>
<td>WELD 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Year Two Total</strong></td>
<td><strong>58</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

EPC: 814

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 097, ENGL& 101, WRITE 100
- **(L)** - WELD 299
- **(M)** - BUS 112, MATH 072B, OCSUP 106
- **(O)** - CMST 102, CMST& 220, OCSUP 102
- **(R)** - BUS 157, OCSUP 101, PSYC 111, PSYC& 100
- **(J)** - Job Seeking Skills (L) - Leadership
- **(M)** - Computation/Mathematics (O) - Oral Communications
- **(W)** - Written Communications (R) - Human Relations

---

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Women's Studies

http://wwcc.edu/womenstudies

Linda Andrews 509.527.4641 linda.andrews@wwcc.edu
Susan Palmer 509.527.4545 susan.palmer@wwcc.edu
Jim Peitersen 509.527.4601 james.peitersen@wwcc.edu
Staci Simmelink-johnson 509.527.4298 staci.simmelink-johnson@wwcc.edu

Program available at/via: [Walla Walla]

Department 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 for career related writing, especially for students in a professional-technical career pathway. Students gain experience in organizing and writing a well-written, professional document.

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

Certificates

Welding Technology Certificate
This certificate is equivalent to the first year of the AAAS Degree in Welding Technology.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Identify major requirements to safely operate equipment to produce cuts, gouges, grinds and weldments.
- Demonstrate set-up, operation and shut down operations using welding and cutting equipment.
- Demonstrate welding, brazing and cutting techniques using fuel gas and electric arc processes.
- Demonstrate knowledge and experience with 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>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<tr>
<td>WELD 151, Shielded Metal Arc Welding I</td>
<td>17</td>
</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>4</td>
</tr>
<tr>
<td>Total Credits</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 152, Shielded Metal Arc Welding II</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 106, Applied Mathematics I (M)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 153, Shielded Metal Arc Welding III</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 101, Job Psychology: Workplace and Educational Success Skills (R)</td>
<td>3</td>
</tr>
<tr>
<td>WRITE 100, Writing in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>23</td>
</tr>
<tr>
<td>Year One Total</td>
<td>66</td>
</tr>
<tr>
<td>Grand Total</td>
<td>66</td>
</tr>
</tbody>
</table>

EPC: 814C

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 097, ENGL& 101, WRITE 100
(L) - WELD 299
(M) - BUS 112, MATH 072B, OCSUP 106
(O) - CMST 102, CMST& 220, OCSUP 102
(R) - BUS 157, OCSUP 101, PSYC 111, PSYC& 100
(J) - Job Seeking Skills
(M) - Computation/Mathematics
(W) - Written Communications

For the most current information see: www.wwcc.edu
Course Descriptions
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. Prerequisite: 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 or OT 161.

ACCT 191, OCCUPATIONAL DEVELOPMENT I 3 Credits

Provides school-based learning experiences that relate with learning experiences on the job. Prerequisite: Enrollment in the Accounting Technology program.

ACCT 192, OCCUPATIONAL DEVELOPMENT II 3 Credits

Provides school-based learning experiences that relate with learning experiences on the job. Prerequisite: Enrollment in Accounting Technology Program.

ACCT 193, OCCUPATIONAL DEVELOPMENT III 3 Credits

Provides school-based learning experiences that relate with learning experiences on the job. Prerequisite: Enrollment in the Accounting Technology Program.

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. 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. 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. Prerequisite: ACCT& 202.

ACCT 210, PRINCIPLES OF ACCOUNTING I FOR ENTREPRENEURS 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. Equivalent to ACCT 201. Student cannot receive credit for both ACCT 201 and ACCT 210. Prerequisite: Instructor Permission.

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.

ABE 002, ABE LEVEL II 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 201-210 on a CASAS test or other intake assessment.

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.

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.

ABE 005, EDUCATIONAL INTERVIEW 1-2 Credits

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.

ABE 013, BASIC MATH 1-4 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. **Prerequisite:** All students under 19 years of age must have a signed release from the last school they attended.

**AGRI 014, ABE MATH**  1-4 Credits  
Focus is on ratio, proportion, percent, simple geometry, algebra, review of fractions and decimals, and solving multi-step word problems to prepare students for the GED® math test.  
**Prerequisite:** Computational skills at a level determined by instructor permission. All students who are under 19 years of age must have a signed release form from the last school 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.

**AGRI 052, WRITING SKILL BUILDING**  1-4 Credits  
Focuses on introducing ABE/ESL students to preparatory college writing skills including generating, developing, supporting, and organizing ideas.  
**Prerequisite:** CASAS score of ESL 211 or above or CASAS score of ABE 200 or above.

**AGRI 066, BASIC e-LEARNING**  1-10 Credits  
Designed to assist basic skills students improve their access to educational and occupational opportunities by enhancing their computer technology literacy and knowledge skills.

**AGRI 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.

---

**AGRI-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, INTRODUCTION TO PRECISION AG AND FARM MANAGEMENT**  5 Credits  
Introduction to precision agriculture application on the farm using industry specific software. Entering records, creating databases and developing field maps will be included as well as gathering and inputting yield and soils data.

**AGRI 108, COMPUTERS IN AGRICULTURE**  5 Credits  
Introduction to microcomputer applications using Microsoft Office software. Student may not earn credit for both AGRI 108 and CS 110.

**AGRI 191, CO-OP 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 197, AG BUSINESS SPECIAL PROBLEMS I**  1-5 Credits  
An independent study course in which students earn credits based upon topics selected by student and guided by faculty.

**AGRI 199, SPECIAL TOPICS**  1-5 Credits  
Study and train to meet established local needs in the agribusiness industry, supplemental to courses currently offered.  
**Prerequisite:** Instructor permission.

**AGRI 201, MICROECONOMICS IN AGRICULTURE**  5 Credits  
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Student may not earn credit for both AGRI 201 and ECON& 201. Formerly AGRI 202. [SS]

**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.

**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.

**AGRI 221, INTRODUCTION TO FOOD AND AGRICULTURAL MARKETS**  5 Credits  
Overview of the marketing system for agricultural commodities. Recommended: One quarter economics.

**AGRI 222, AGRICULTURAL AND WATER POLICY**  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. [SS]

**AGRI 297, SPECIAL PROJECTS**  1-15 Credits  
Project-oriented experiences in the area or applications not covered in the standard agri-business curriculum.  
**Prerequisite:**
AGRICULTURE SCIENCE AND TECHNOLOGY

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.

AGPR 101, INTRO. TO ENVIRONMENTAL SCIENCE 5 Credits
Provides a study of natural and modified systems and their interactions with humans and other living organisms. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 099; 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. [NS]

AGPR 105, WEED BIOLOGY AND IDENTIFICATION 5 Credits
Introduction in weed science to provide an understanding of the principles and methods of controlling weeds, use and development of herbicides, methods of application and rate calculation, sprayer components and calibration, and practical knowledge of plant and seed samples of weeds common to the Pacific Northwest.

AGPR 110, LIVESTOCK PRODUCTION 5 Credits
Introduction to the livestock industry and its importance to the U.S. economy.

AGPR 112, FEEDS AND FEEDING 5 Credits
Addresses common feeding practices and nutrient characteristics of animal feeds.

AGPR 113, PLANT ANATOMY AND MORPHOLOGY 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.

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 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 Credits)

AGPR 140, AG 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 will be covered. (WAC 296-307 Credits)

AGPR 173
FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

AGPR 187, INDEPENDENT RESEARCH I 1-5 Credits
An extension course where participants develop a plan, research the topic and write a report summarizing their finding or results.

AGPR 188, INDEPENDENT RESEARCH II 1-5 Credits
An extension course where participants develop a plan, research the topic and write a report summarizing their finding or results.

AGPR 189, INDEPENDENT RESEARCH III 1-5 Credits
An extension course where participants develop a plan, research the topic and write a report summarizing their finding or results.

AGPR 196, LIVESTOCK PRODUCTION SPECIAL PROBLEMS I 1-5 Credits
Participate in a number of subjects dealing with livestock production on a structured or independent study basis. Prerequisite: Instructor permission.

AGPR 197, LIVESTOCK PRODUCTION SPECIAL PROBLEMS II 1-5 Credits
Participate in a number of subjects dealing with livestock production on a structured or independent study basis. Prerequisite: Instructor permission.
Instructor permission, based on evaluation of student's education and work experience.

Not covered in the standard agriculture science curriculum.

Project-oriented experiences in the area or applications

AGPR 297, SPECIAL PROJECTS 1-15 Credits

Students will also be required to participate in the activities of the Ag Technology club.

Explore issues related to effective workplace relationships and applying leadership skills to promote personal development.

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

Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

AGPR 201, BASIC SOIL SCIENCE 5 Credits

Prerequisite: AGPR 201 or instructor permission.

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. Formerly AGRI 215.

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 198, LIVESTOCK PRODUCTION SPECIAL PROBLEMS III 1-5 Credits

Participate in a number of subjects dealing with livestock production on a structured or independent study basis.

AGPR 199, SPECIAL TOPICS 1-5 Credits

Study and train to meet established local needs in the agriculture industry, supplemental to courses currently offered.

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.

AGPR 215, FIELD CROP PRODUCTION 5 Credits

Production and management of field crops designed to provide the most current information in the production and management of agronomic crops important to the economy of the Pacific Northwest.

AGPR 216, MEAT SCIENCE II 5 Credits

Principles of fabrication and marketing of meats, and the effects of preservation and storage on the physical and chemical properties of meat will be analyzed.

AGPR 222, 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. Formerly AGRI 215.

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.

AGPR 201, BASIC SOIL SCIENCE 5 Credits

Prerequisite: AGPR 201 or instructor permission.

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. Formerly AGRI 215.

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.

ALCDA 231, SURVEY OF CHEMICAL DEPENDENCY 5 Credits

Introduction to the field of chemical abuse and dependency by examining use, abuse, and addiction as these relate to alcohol and other psychoactive licit and illicit drugs.

ALCDA 233, PHYSIOLOGICAL ACTIONS OF ALCOHOL AND DRUGS 4 Credits

Provides an understanding of the effects of psychoactive drugs on human physiology and behavior. Psychoactive substances will be discussed in their historical, social, and physiological contexts.

ALCDA 235, BASIC CHEMICAL DEPENDENCY COUNSELING AND THERAPY 4 Credits

Counseling skills used in an individual counseling session will be explored. This class is required for individuals seeking chemical dependency counseling certification and is open to any student who is interested in basic counseling techniques.

ALCDA 236, GROUP DYNAMICS IN CHEMICAL DEPENDENCY COUNSELING 5 Credits

Designed to expose students to the actual functions of the therapy group. Students will observe and participate in experiential exercises.

ALCDA 237, CHEMICAL DEPENDENCY IN THE FAMILY 4 Credits

Concept of addiction as a family disease. The relationship of the family system and family involvement will be analyzed. Modalities of treatment for family members and techniques of intervention will be explored.

ALCDA 238, CHEMICALLY DEPENDENT CLIENT 3 Credits

Acquaints the student with the main components of managing the chemically dependent client. The course will focus on the overview of case management, rules and regulations, treatment, record keeping, assessments, treatment planning, conferences and consultation, discharge planning, and latest trends in this growing field.

ALCDA 242, RELAPSE PREVENTION 5 Credits

Students will learn to exhibit skills necessary to facilitate clients in preventing relapse by effectively using relapse prevention counseling and recovery enhancements methods to identify and manage high-risk situations.

ANTHROPOLOGY

ANTH& 100, SURVEY OF ANTHROPOLOGY 5 Credits

Introduction to the study of anthropology. Provides a brief study of the four main subfields of anthropology: Biological Anthropology, Archaeology, Cultural Anthropology, Linguistics and various cultures around the world. Recommended: READ 088. Formerly ANTH 101, Intro to Anthropology. [SS]

ANTH& 206, CULTURAL ANTHROPOLOGY 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. [SS]
ANTH 250, HONORS SEMINAR: ANCESTRAL PUEBLOAN CIVILIZATION  
2 Credits
Designed to introduce students to the past and present worlds of indigenous people of the southwest four corners region.
Prerequisite: Member of Honors program or instructor permission.

ANTH 297, FIELD STUDIES  
1-10 Credits
Introduction to anthropology via the field studies experience. May be taken in conjunction with other classroom offerings or as a single course. Prerequisite: Instructor permission.

ART

ART& 100, ART APPRECIATION  
5 Credits
Study and appreciation of the various periods in the history of art and the materials and methods used by artists. Formerly ART 100, Art Appreciation. [H]

ART 101, DRAWING I  
4 Credits
Explores the basic techniques of drawing using a variety of media. Lab hours required. [HP]

ART 102, DRAWING II  
4 Credits
Intermediate course designed for further exploration of the basic techniques of drawing using a variety of media. Lab hours required. Prerequisite: ART 101. [HP]

ART 103, DRAWING III  
4 Credits
Advanced drawing course with emphasis on drawing the human figure. Lab hours required. Prerequisite: ART 101 or instructor permission. [HP]

ART 104, DESIGN I (BLACK & WHITE)  
4 Credits
Study and application of the formal elements of art structure. [HP]

ART 105, DESIGN II (COLOR)  
4 Credits
Study and application of the formal elements of art structure, with emphasis on color designs. [HP]

ART 106, DESIGN III (3-D DESIGN)  
4 Credits
Study and application of the elements of three-dimensional art structure. [HP]

ART 107, FUND OF DIGITAL ART  
5 Credits
Introduces digital techniques and concepts as they aid and expand the possibilities of traditional drawing, painting, and photography. It emphasizes the synthesis of artistic expression and technological competence through hands-on experience in creating art through both traditional and digital media. [HP]

ART 108, COMMERCIAL ART FOUNDATION  
5 Credits
Introduces the software, materials, and techniques used in marketing, advertising, branding, and identity design. Emphasis is placed on design for advertising and branding for existing and new companies. This course counts as an elective toward an AA degree, rather than credit toward the Humanities requirement.

ART 111, INTRODUCTION TO STUDIO ART PRACTICES  
4 Credits
Basic studio/lecture format introducing a variety of the fine art studio techniques, processes, tools and materials commonly used by working artists: painting, drawing, printmaking, design (with various emphasis; digital, graphic, etc.), ceramics, sculpture, calligraphy, photography. Five of these studio areas will be chosen for the quarter. Emphasis on craftsmanship and visits to local studios.

ART 115, DRAWING FOR FARRIER SCIENCE  
1 Credit
Drawing for Farrier Science will utilize formal drawing skills in the depiction of both traditional still-life forms and equine anatomical schematics. Prerequisite: Must be enrolled in the Farrier Science program.

ART 124, WOMEN ARTISTS IN HISTORY A-D  
5 Credits
Articulates and clarifies the influences of historically determined forces, cultural and psychological, affecting the lives of diverse women artists from ancient to modern times. Student may not earn credit for both ART 124 and WST 124. [H][D]

ART 126, WOMEN ARTISTS: AN HISTORICAL SURVEY  
5 Credits
Focuses on the unique artistic contributions of women artists through history from the middle ages to the present.

ART 127, HISTORY OF WESTERN ART I  
5 Credits
A study of art of Europe, Egypt, and the near East from the Prehistoric Period through the Middle Ages. [H]

ART 128, HISTORY OF WESTERN ART II  
5 Credits
Study of art in Europe and Early America from the fourteenth through the eighteenth centuries. [H]

ART 129, HISTORY OF WESTERN ART III  
5 Credits
Study of art in Europe and the U.S. made during the nineteenth and twentieth centuries. [H]

ART 130, PAINTING I  
4 Credits
Exploration of the various methods of painting. [HP]

ART 131, PAINTING II  
4 Credits
Intermediate course for exploration of the various methods of painting. Prerequisite: ART 130. [HP]

ART 132, PAINTING III  
4 Credits
Advanced course for exploration of the various methods of painting. Prerequisite: ART 131. [HP]

ART 140, PORTRAIT PAINTING  
4 Credits
Theory and practice of portrait painting techniques integrated with various ideas and approaches to portraiture through the ages. [HP]

ART 151, PRINTMAKING I  
4 Credits
Exploration of the relief, silkscreen, and intaglio methods of printmaking. [HP]

ART 152, PRINTMAKING II  
4 Credits
Exploration of the relief, silkscreen, and intaglio methods of printmaking. Prerequisite: ART 151. [HP]
### ART 153, PRINTMAKING III  
4 Credits  
Exploration of the relief, silkscreen, and intaglio methods of printmaking. **Prerequisite:** ART 152. [HP]

### ART 160, CERAMICS I  
4 Credits  
Introduction to theory, history, and aesthetics of ceramics with emphasis on various hand building methods. Lab hours required and materials to be purchased. **Prerequisite:** ART 160 or instructor permission. [HP]

### ART 161, CERAMICS II  
4 Credits  
Intermediate study of theory, history, and aesthetics of ceramics using hand building methods with a focus on wheel throwing. Lab hours required and materials to be purchased. **Prerequisite:** ART 160 or instructor permission. [HP]

### ART 162, CERAMICS III  
4 Credits  
Advanced study of theory, history, and aesthetics of ceramics using hand building and wheel thrown forms. Lab hours required and materials to be purchased. **Prerequisite:** ART 161 or instructor permission. [HP]

### ART 167, SCULPTURE I  
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. [HP]

### ART 168, SCULPTURE II  
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. [HP]

### ART 169, SCULPTURE III  
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. [HP]

### 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 with professional software. This course does not meet the Humanities requirement for the AA degree.

### ART 195, INTRODUCTION TO ART  
2 Credits  
A course for non-art oriented students involving participation 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  
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  
4 Credits  
Theory, history, aesthetics of ceramics and sculpture using hand building and wheel thrown forms. Lab hours required and materials to be purchased. [HP]

### ART 261, CERAMICS AND SCULPTURE II  
4 Credits  
Theory, history, aesthetics of ceramics and sculpture using hand building and wheel thrown forms. Lab hours required and materials to be purchased. [HP]

### ART 262, CERAMICS AND SCULPTURE III  
4 Credits  
Theory, history, aesthetics of ceramics and sculpture using hand building and wheel thrown forms. Lab hours required and materials to be purchased. [HP]

### 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. **Prerequisite:** Instructor permission.

### ASTR 110, THE SOLAR SYSTEM  
5 Credits  
Examination of the formation of our solar system and the nature of our sun and planets. **Prerequisite:** 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. Formerly ASTR 110, The Solar System. [NS]

### ASTR 115, STELLAR ASTRONOMY  
5 Credits  
Explores the formation, evolution, and death of stars **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. [NS]

### ASTR 120, GALAXIES, THE UNIVERSE, AND COSMOLOGY  
5 Credits  
Current ideas about the nature of galaxies and the universe as a whole **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. [NS]

### ASTR 297, SPECIAL TOPICS IN ASTRONOMY  
1-5 Credits  
Provides an opportunity to design and implement a project of interest in astronomy under the supervision of an instructor **Prerequisites:** Successful completion of one ASTR course; appropriate placement score or grade of C or higher in ENGL 099; or permission of the Science Division Chair or designee. Recommended: Appropriate placement score or grade of C or higher in READ 088.

### ASTR 298, SPECIAL TOPICS IN ASTRONOMY  
1-5 Credits  
Provides students the opportunity to design and implement a project of interest in astronomy under the supervision of an instructor **Prerequisites:** Successful completion of one ASTR course; appropriate placement score or grade of C or higher in ENGL 099; or permission of the Science Division Chair or designee. Recommended: Appropriate placement score or grade of C or higher in READ 088.

---

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

176
in ENGL 099; or permission of the Science Division Chair or designee. Recommended: Appropriate placement score or grade of C or higher in READ 088.

**AUTO 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 CARE** 1-3 Credits
Introduction to auto mechanics 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 economical 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.

**AMM 145, AUTO RELATED INDUSTRY** 1-6 Credits
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. Co-requisites: AMM 149 and 245.

**AMM 149, HYBRID AND ALTERNATIVE FUEL VEHICLES** 1-2 Credits
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. 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 I** 1-11 Credits
Study of 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. Co-requisites: AMM 153, 171 and 181.

**AMM 152, ENGINE PERFORMANCE II** 1-9 Credits
Introduction to automotive ignition system theory, diagnosis and repair, emission systems theory, diagnosis and repair and on-board computer system theory, diagnosis, and repair. **Prerequisite:** AMM 161; Co-requisites: AMM 232, 242, 253, and 254.

**AMM 153, HIGH-VOLT BATTERY RECONDITIONING AND REBUILDING** 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 154, ENGINE PERFORMANCE II** 1-19 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 155, AUTOMOTIVE HIGH VOLTAGE SYSTEMS II** 1-5 Credits
Introduction to automotive ignition system theory, diagnosis and repair, emission systems theory, diagnosis and repair and on-board computer system theory, diagnosis and repair. **Prerequisite:** AMM 151 and 181.

**AMM 156, ELECTRICAL AND ELECTRONICS** 1-4 Credits
Air conditioning terminology, system safety, refrigeration principles, operation, service and repair of refrigeration plumbing systems will be covered. The student will become familiar with all major components of a typical climate control system. **Prerequisite:** AMM 161; Co-requisites: AMM 151 and 181.

**AMM 171, AIR CONDITIONING AND HEATING** 1-4 Credits
Air conditioning terminology, system safety, refrigeration principles, operation, service and repair of refrigeration plumbing systems will be covered. The student will become familiar with all major components of a typical climate control system. **Prerequisite:** AMM 161; Co-requisites: AMM 151 and 181.

**AMM 180, SUSPENSION AND ALIGNMENT** 1-4 Credits
Introduction to the automotive alignment and suspension theory, diagnosis and repair. Co-requisites: AMM 151 and 171.

**AMM 181, CO-OP 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 181, SPECIAL 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 1-21 Credits
Disassembly, inspection, and reassembly of the gasoline internal combustion engine.

AMM 224, AUTOMATIC TRANSMISSION/TRANSAXLES 1-13 Credits
Theory, diagnosis and repair of automatic drivetrain components used on today’s light duty vehicles are studied. Subjects covered in this course are; torque converters, planetary gear sets, hydraulic systems, electronic controls, valve bodies and CVT’s. Co-requisite: AMM 225.

AMM 225, MANUAL DRIVE TRAIN AND AXLES 1-8 Credits
Theory, diagnosis and repair of manual drivetrain components used on today’s vehicles will be covered. Students will learn to diagnose and repair clutches, differentials, transfer cases and drive axles. Co-requisite: AMM 224.

AMM 232, AIR CONDITIONING AND HEATING II 1-4 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 and 242.

AMM 242, SUSPENSION AND ALIGNMENT II 1-4 Credits
Advanced automotive alignment theory, diagnosis and repair. The student will learn automotive terminology, shop and personal safety. Prerequisite: AMM 181; Co-requisite: AMM 152 and 232.

AMM 245, BRAKES 1-13 Credits
Training in theory, diagnosis and repair of automotive brake systems. Students will study disc, drum and anti-lock brake systems. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 145 and 149.

AMM 247, ADVANCED AUTO REPAIR 1-21 Credits
Provides advanced training for students who have completed the AAAS Degree in Auto Mechanics and desire specialized training in a specific area. Prerequisite: Instructor permission.

AMM 254, COMPRESSED NATURAL GAS VEHICLE SERVICE AND REPAIR 2 Credits
This course presents an introduction to compressed natural gas (CNG) vehicles. Students are required to gain an understanding of CNG theory, safety, regulations, maintenance and repair of CNG equipped vehicles. Students will perform diagnostic testing and analysis of failed CNG components. Students will apply basic competencies to grasp in-depth workings of CNG-fueled vehicles. This course will focus on combining classroom instruction and theory with the opportunity to apply theory through hands-on activities performed in the lab/shop. Co-requisites: AMM 152, 232, 242, 255.

AMM 255, CNG CONVERSION/INSTALLATION 2 Credits
This course presents an introduction to compressed natural gas (CNG) conversions and installation on vehicles. Students are required to gain an understanding of the process required to convert and install CNG systems on vehicles. Students will install CNG conversion kits on light and heavy duty vehicles. This course will focus on combining classroom instruction and theory with the opportunity to apply theory through hands-on activities performed in the lab/shop. Prerequisite: Instruction permission required.

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
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

ASL & 121, AMERICAN SIGN LANGUAGE I 1-5 Credits
Introduction to American Sign Language including basic sign language vocabulary and deaf culture. Formerly COMM 107, American Sign Language I.

ASL & 122, AMERICAN SIGN LANGUAGE II 1-5 Credits
This is the second course in a series of three classes that introduces the basics of American Sign Language ASL). Prerequisite: C- or better in ASL & 121 or equivalent course. Formerly COMM 108, American Sign Language II.

ASL & 123, AMERICAN SIGN LANGUAGE III 1-5 Credits
Continuation of ASL & 122. This is the third course in a series of three courses that introduces the basics of American Sign Language (ASL). Prerequisite: C- or better in ASL & 122 or equivalent course. Formerly COMM 109, American Sign Language III.

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

BIOL 100, SURVEY OF BIOLOGY  5 Credits
Emphasizes ecology, genetics, evolution and the diversity of life, primarily intended for undecided or non-science students.
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 BIOL 110, Survey of Biology. [NS]

BIOL 130, GENERAL ECOLOGY  5 Credits
Study of the interrelationships of organisms with their environment. Field trips and lab exercises support lecture discussions. 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 BIO 130. [NS]

BIOL 150, EQUINE BIOLOGY  3 Credits
Focuses on the structure and function of the horse. Recommended: READ 088 or higher. Formerly BIOL 170.

BIOL& 160, GENERAL BIOLOGY W/LAB  5 Credits
Introduction to the study of the cell, the basic component of all living organisms. This class is intended to provide a solid background for students planning to enter Allied Health programs. Emphasis is on cell chemistry, structure, metabolism, energetics, cell division and genetic principles. The basics of DNA technology are also covered. Lab work is required. This course does not satisfy the prerequisite for BIOL& 212 or BIOL& 213. 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 BIO 151, Cell Biology. [NS]

BIOL& 265, INTRODUCTION TO IMMUNOLOGY  2 Credits
Tissues, cells and molecules of immune system, innate immunity and complement, adaptive immunity, cellular and humoral immune responses, cytokines, T-cell activation, the major histocompatibility complex, antibody structure and function, immune system and cancer, autoimmunity, hypersensitivity. This course does not include a lab. Prerequisite: Grade of C or higher in BIOL& 260 or BIOL& 252, or concurrent enrollment in the WWCC Nursing Program. Formerly BIO 265.

BIOL& 170, HUMAN BIOLOGY  5 Credits
This non-lab course will provide a general overview of the structure (anatomy), organization and functions (physiology) of the human body. Prerequisite: appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. [NS]

BIOL& 175, HUMAN BIOLOGY W/LAB  5 Credits
Emphasizes acquiring sufficient background to make informed decisions about the biology of the human body. THIS COURSE DOES NOT FULFILL THE REQUIREMENTS FOR THE NURSING PROGRAM. 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 BIO 120, Bio of the Human Organism. [NS]

BIOL 180, INTRODUCTION TO CONSERVATION  5 Credits
Introduces conservation principles while giving a strong background in biology and ecology concepts necessary to understand conservation. This course does not include a lab. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087. Recommended: READ 088.

BIOL 199, SPECIAL TOPICS  5 Credits
Opportunity for students to pursue special interests in topics in biology. Requires working with biology faculty to develop a project and to determine the research and presentational methods as well as outcomes to be achieved and assessed.

BIOL 205, INTRODUCTION TO ANIMAL BEHAVIOR  5 Credits
Study of the behavior and social organization of a variety of animal groups ranging from insects to primates; analysis of general principles of behavior modes; observation of animal behavior in the field and laboratory. Lab work required Prerequisites: BIOL& 100, or BIOL& 160, or BIOL& 211, or BIOL 130.

BIOL& 211, MAJORS CELLULAR  5 Credits
An introductory cell biology course for biology majors and other pre-professional students planning to transfer to a four-year university. This is the first of a three-quarter sequence which provides a full year of introductory biology. This course provides an emphasis on cellular chemistry, eukaryotic and prokaryotic cell structure and function, metabolism, energetics, cell growth, Mendelian and molecular genetics. Lab work is required. Students preparing for Allied Health programs are advised to take BIOL& 160. Prerequisite: Grade of C or higher in High School Chemistry (1 year) or CHEM& 110 or higher and appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088. [NS]

BIOL& 212, MAJORS ANIMAL  5 Credits
General structure and classification of invertebrate phyla. Prerequisite: BIOL& 211. Formerly BIO 153, General Zoology I. [NS]

BIOL& 213, MAJORS PLANT  5 Credits
Introduction to the basic structure and function of stems, roots, leaves, flowers, fruits, and seeds. Prerequisite: BIOL& 211. Formerly BIO 152, General Botany. [NS]

BIOL 221, SYSTEMATIC BOTANY (PLANT IDENTIFICATION)  5 Credits
Introduction to plant identification with emphasis on plants native to Eastern Washington. Prerequisite: BIOL& 100 or 211, or AGPR 113, 114 or AGRI 215. Recommended: READ 088. Formerly BIO 221. [NS]

BIOL& 251, HUMAN A & P I  5 Credits
Study of the structure and function of human body. Topics include introduction to the human body, histology and the skeletal, muscular, and nervous systems. Prerequisite: Grade of C or higher in BIOL& 160 or 211. Formerly BIO 210, Anatomy & Physiology I. [NS]
BUSINESS ADMINISTRATION

BIOL& 252, HUMAN A & P II 5 Credits
Study of the structure and function of the endocrine, cardiovascular, respiratory, digestive, and urinary systems. **Prerequisite:** Grade of C or higher in BIOL& 211, Anatomy and Physiology II. [NS]

BIOL& 253, HUMAN A & P III 5 Credits
Study of the structure and function of human body. Topics include reproductive system, embryology, the special senses, lymphatic and immune system, metabolism, and fluids and electrolyte balance. **Prerequisite:** Grade of C or higher in BIOL& 251. Formerly BIO 212, Anatomy and Physiology III. [NS]

BIOL& 260, MICROBIOLOGY 5 Credits
Study of the general biology of microorganisms and their classification, morphology, and physiology with emphasis on the importance of microorganisms causing infectious diseases. **Prerequisite:** Grade of C or higher in BIOL& 160 or 211 or permission of the Science Division Chair or designee. Formerly BIO 230, Microbiology. [NS]

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. Recommended: MATH 049 (course no longer offered) or 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 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 077. 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 or instructor permission. Formerly BA 137.

BUS 140, BUSINESS COMMUNICATIONS II FOR ENTREPRENEURS 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:** Instructor permission.

BUS 153, ECONOMIC SURVEY I 4 Credits
Develop the background necessary to conduct a marketing research project, including: tools of research, planning and design, methodologies of research design, and presenting the results of research. Formerly BA 153.

BUS 154, ECONOMIC SURVEY II 4 Credits
Plan a research project that includes describing problem(s) to be solved, reviewing related literature, deciding on statistical method that will be used, selecting the style and format of the research, conducting the research, and writing the research report. **Prerequisite:** BUS 153. Formerly BA 154.

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. Recommended: READ 088. Formerly BA 157.

BUS 180, PRINCIPLES OF MANAGEMENT FOR ENTREPRENEURS 5 Credits
Organized around the four traditional functions of management: planning, organizing, leading, and controlling. There will
BUS 187, PRINCIPLES OF SELLING 5 Credits
Analyze how sales personnel meet customers’ needs, present benefits, gain commitment for purchase and provide service after the sale. Formerly BA 187.

BUS 189, PRINCIPLES OF MANAGEMENT 5 Credits
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. Formerly BA 192.

BUS 194, ENTREPRENEURSHIP DEVELOPMENT 5 Credits
Students will review the steps for opening a business and complete a business plan clearly evaluating and illuminating the opportunity for entrepreneurial success. Prerequisite: Instructor Permission.

BUS 197, ELECTRONIC COMMERCE: A BUSINESS PERSPECTIVE 5 Credits
Identifies the critical areas of electronic business interactions, how the internet works, security, forms of payment, and the key elements of an electronic commerce business plan. Formerly BA 197.

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 212, MARKETING FOR ENTREPRENEURS 5 Credits
The relevance of marketing in the modern economy, topics include functions of marketing, customer understanding, TQM, opportunity analysis, and the marketing mix. Prerequisite: Instructor permission.

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. Formerly BA 215.

BUS 217, COMPUTER SOFTWARE APPLICATIONS 5 Credits
Application of various software currently used in home and work environments. Prerequisite: CS 110. Formerly BA 217.

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, CO-OP WORK EXPERIENCE III 1-10 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 1-3 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 293, BUSINESS LEADERSHIP SEMINAR VI 3 Credits
Students select and perform a community service project. The students need to determine how the project will help the community and how many people will benefit. Formerly BA 293.

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.

BUS 287, 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.

CPR 044, CPR TRAINING 1-0 Credits
CPR training for the general public using the AHA “Friends and Family” course. This course does not meet AHA requirements for healthcare providers.

CPR 045, HEARTSAVER 1-0 Credits
Provides the general public instruction in “Heartsaver” CPR based on standards established by the American Heart Association.
CPR 051, BASIC LIFE SUPPORT FOR HEALTHCARE PROVIDERS 0.4 Credits
Designed for healthcare providers and provides CPR instruction based on standards established by the American Heart Association.

CPR 052, BLS INSTRUCTOR TRAINING 0.8 Credits
Provides the necessary knowledge and skills to facilitate BLS/CPR training for both the general public and healthcare professionals adhering to the standards of the American Heart Association.

CPR 055, BLS/CPR INSTRUCTOR UPDATE 0.6 Credits
BLS/CPR Instructor update for current CPR instructors. This course will update AHA standards and provide skill training to renew CPR Instructor status following American Heart Association guidelines. Student must have a BLS/CPR Instructor card issued within the last two years to enroll.

### CHEMISTRY

CHEM 105, CHEMICAL CONCEPTS 5 Credits
Will investigate key chemical concepts and principles 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. [NS]
**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.

CHEM 110, CHEMICAL CONCEPTS W/LAB 5 Credits
A practical introduction to inorganic, organic, and biochemistry designed primarily for students in various health-related programs. The course meets general education lab science requirements. Lab work required **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. Formerly CHEM 101, Chemistry. [NS]

CHEM& 121, INTRO TO CHEMISTRY 5 Credits
Survey of inorganic chemistry for nursing and allied health students. **Prerequisites:** MATH 065 (course no longer offered) or MATH 78E instructor permission; 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. Formerly CHEM 107, General Chemistry for Health Sciences. [NS]

CHEM& 122, INTRO TO ORGANIC CHEMISTRY 5 Credits
A survey of organic chemistry. Topics include structure, function and chemistry of aliphatic and aromatic hydrocarbons, alcohols, ethers, carboxylic acids, amines, and related compounds; mechanisms, and stereochemistry. **Prerequisite:** CHEM& 121. Formerly CHEM 108, Organic Chemistry for Health Sciences. [NS]

CHEM& 123, INTRO TO BIOCHEMISTRY 5 Credits
A brief survey of biochemical principles. Topics include structure, function and chemistry for biomolecules, enzymatic catalysis, metabolic pathways, genetic expression, and biotechnology. **Prerequisite:** CHEM& 122. Formerly CHEM 109, Biochemistry for Health Sciences. [NS]

CHEM& 139, GENERAL CHEMISTRY PREP 5 Credits
Survey of inorganic chemistry, without lab. Chem&139 is intended for science majors who have not had chemistry in high school and need the chemical and mathematical preparation required for the CHEM& 161, CHEM& 162, CHEM& 163 series. It can also be used to fulfill the AA degree requirement in Natural Science. **Prerequisites:** MATH 065 (course no longer offered) or MATH 78E or instructor permission; 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. [NS]

CHEM& 161, GENERAL CHEM I W/LAB 5 Credits
Study of the composition, structure, and properties of matter and its changes for science, engineering. Lab work required. **Prerequisites:** Grade of C or higher in High School Chemistry (1 year) or CHEM& 110 or higher and appropriate placement score or grade of C or higher in ENGL 087; concurrent enrollment in or completion of college level math, or permission of the Science Division Chair or designee. Recommended: READ 088. Formerly CHEM 121, General Chemistry I. [NS]

CHEM& 162, GENERAL CHEM II W/LAB 5 Credits
Study of molecular polarity and states of matter, solution chemistry, kinetics, chemical equilibria, and acid/base chemistry. **Prerequisite:** CHEM& 161. Formerly CHEM 122, General Chemistry II. [NS]

CHEM& 163, GENERAL CHEM III W/LAB 5 Credits
Study of aqueous equilibria, atmospheric chemistry, thermodynamics, electrochemistry, nuclear chemistry, coordination compounds, and organic chemistry. **Prerequisite:** CHEM& 162. Formerly CHEM 123, General Chemistry III-Honors. [NS]

CHEM 199, SPECIAL TOPICS 5 Credits
Opportunity for students to pursue special interests in topics in chemistry. Requires working with chemistry faculty to develop a project and to determine the research and presentation methods as well as outcomes to be achieved and assessed. **Prerequisite:** Instructor permission.

### 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. **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

For the most current information see: www.wwcc.edu
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 1-5 Credits
Discover how to become an effective student by understanding processes of memory and learning, test preparation, time management, taking notes, comprehending textbooks, and concentration. Recommended: Enrollment in at least one course at a 100 level or above, preferably a lecture class. Formerly PSY 100.

CE 114, LONG-TERM FINANCIAL PLANNING AND CONTINUING ED 1 Credit
Course will provide students the tools required for successful long-term personal financial planning. Topics covered include capital asset purchasing, retirement, continuing education planning, and factors the influence the credit rating. Prerequisite: Must be fully enrolled in TRIO program and instructor permission.

CE 115, PERSONAL/FAMILY BUDGETING 1 Credit
Course provides the student with tools that will improve personal and family budgeting. Topics include short-term financial planning through the use of budgets, income/expense analysis, allocation of funds, cost-cutting strategies, and credit/money management. Prerequisite: Fully enrolled in TRIO program and instructor permission.

CE 116, COLLEGE COSTS, FINANCING, AND PROCEDURES 1 Credit
Learn about the rising costs of college, perspective funding options, student loan repayment options, and budgeting for education. Prerequisite: Fully enrolled in TRIO program and instructor permission.

ABT 100, INTRO TO AUTO BODY REPAIR 1-21 Credits
Provides high school students with an overview of the auto body repair industry. Topics include body shop safety, use of common hand tools, power tools, body hand tool operations and body fasteners. Prerequisite: Current High School student.

ABT 104, INTRODUCTION TO AUTO BODY REPAIR I 1-21 Credits
Introductory evening course for the auto body repair industry. Topics include body shop safety, use of common hand tools, power tools, body hand tool operations and body fasteners.

ABT 105, INTRODUCTION TO AUTO BODY REPAIR II 1-21 Credits
Evening course for the auto body repair industry. Topics include body shop safety, use of common hand tools, power tools, body hand tool operations and body fasteners. The study of mild and high strength steel, sheet metal design, and collision damage analysis will be covered.

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.

ABT 162, AUTO BODY REPAIR II 1-21 Credits
Provides job planning, sheet metal repair, and metal finishing operations.

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, CO-OP 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 will be covered.

ABT 266, DAMAGE ESTIMATING AND SHOP OPERATION 1-21 Credits
Introduction to procedure and sequence of writing collision damage estimates.

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.
COMMERCIAL TRUCK DRIVING

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.

COMMERCIAL TRUCK DRIVING

TRK 095, FLAGGER TRAINING 0.8 Credits
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 100, LONGER COMBINATION VEHICLE REGULATIONS TRAINING 0.8 Credits
This class meets the requirement as entered into the Federal Register March 30, 2004 49 CFR Parts 380 and 391, otherwise defined as Minimum Training Requirements for Long Combination Vehicle (LCV) Operators.

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: Pass DOT physical and mandatory drug test; have a social security card and satisfactory driving record for past five years; 18 years of age or older; and instructor permission.

TRK 105, HARVEST TRUCK DRIVER TRAINING 1-10 Credits
Training for entry-level farm truck driving jobs and CDL testing, behind-the-wheel instruction, DOT rules and regulations, mechanical overview of trucks; safety.

TRK 110, TRUCK DRIVER TRAINING 12 Credits
Entry-level lecture training for long haul truck driving jobs and commercial driving license testing Prerequisites: Pass DOT physical and mandatory drug test, have a social security card and have a satisfactory driving record for past five years.

TRK 120, TRUCK DRIVER TRAIN LAB 1-10 Credits
Laboratory training and experience for entry-level long haul truck drivers and commercial driving license testing. Co-requisite: TRK 110.

TRK 125, BUS ENDORSEMENT TRAINING 1 Credit
Laboratory training and experience for entry-level passenger and school bus drivers and Commercial Driver’s License testing. Provides training to gain your passenger (P1) School Bus Endorsement. Prerequisite: Instructor permission.

TRK 191, CO-OP WORK EXPERIENCE 1-18 Credits
Advanced on-the-job-training for entry-level long-haul truck driving jobs Prerequisites: TRK 110 and 120.

TRK 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. Co-requisite: TRK 191.

TRK 199, SPECIAL TOPICS 1-10 Credits
Study and train to meet established local needs in the commercial truck industry, supplemental to courses currently offered.

TRK 297, SPECIAL PROJECTS 1-18 Credits
Project-oriented experiences in the area or applications not covered in the standard commercial truck driving curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

COMMUNICATION STUDIES

CMST 100, INTRODUCTION TO DICTION 3 Credits
Students learn about and practice expressing and listening skills related to basic patterns of American English. Formerly SPCH 100. [C]

CMST 102, INTERPERSONAL COMMUNICATION 3 Credits
Theory and practice of interpersonal communication; understanding self and others while working to improve effective communication in one-on-one interactions. Formerly SPCH 102. [C] [D]

CMST 103, PHONETICS AND ARTICULATION 3 Credits
Study of American speech with emphasis on proper expression, pronunciation, and voice production. Formerly SPCH 103. [C]

CMST 201, INTERCULTURAL COMMUNICATION 5 Credits
Theory and practice of intercultural communication; understanding culture and cultural differences, both internationally and domestically, while working to develop the skills necessary to improve effective communication and relationships across cultures. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly SPCH 201. [C][D]

CMST 210, INTERPERSONAL COMMUNICATION 3 Credits
Theory and practice of interpersonal communication; understanding self and others while working to improve effective communication in one-on-one interactions. [C]

CMST 220, PUBLIC SPEAKING 5 Credits
Develops students’ competency in planning, preparing, presenting, and evaluating basic speeches. Formerly SPCH 101, Fundamentals of Speech. [C]

COMPUTER SCIENCE

CS 100, INTRO TO MICROCOMPUTERS 5 Credits
Introductory hands-on computer course intended for non-majors. Provides the beginning computer user an elementary understanding of computer hardware, the operating system, word processing, spread sheeting, email and correct file management. Recommended: Keyboarding skills.

CS 104, CAMPUS COMPUTER SURVIVAL 2 Credits
This 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 Canvas and computer use on our campus.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
CS 105, INTERMEDIATE COMPUTER CONCEPTS  1-5 Credits
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 (intended for students who need additional training before CS 110).

CS 110, INTRODUCTION TO COMPUTERS AND APPLICATIONS  5 Credits
Application of the software currently used in home and work environments. Computer Software Principles emphasizes proficiency in using basic functions in word processing, spreadsheets, databases, presentations, 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 AND 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 INTERNET TECHNOLOGY  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. Recommended: CS 115.

CS 130, PC SUPPORT AND MAINTENANCE I  5 Credits
Develop an understanding of the meaning, function, and purpose of the personal computers, their history and basic vocabulary. 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++  5 Credits
Introduction to computer science principles and concepts including algorithm, data structures, and C++ programming. Prerequisite: Grade of C or higher in MATH 095 (course no longer offered) or MATH 78E. Recommended: CS 121. [Q]

CS 140, JAVASCRIPT SPECIALIST  5 Credits
Introduction to programming using the JavaScript programming language. This CIW JavaScript Specialist course material, prepares you for the CIW JavaScript Specialist certification exam.

CS 141, COMPUTER SCIENCE I JAVA  5 Credits
Introduction to programming in the Java programming languages. Recommended: CS 121

CS 142, PERL PROGRAMMING  5 Credits
Introduction to programming in the Perl programming language. Topics include expressions and strings in Perl, arrays, functions, creating object oriented Perl scripts, interfacing with databases.

CS 191, CO-OP 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 199, SPECIAL TOPICS  1-5 Credits
Study and train to meet established local needs in the computer technology industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

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 AND VIDEO  5 Credits
Learn video technologies, basic equipment operation, video composition, basic lighting and audio, production planning, and visual storytelling.

CS 222, DESKTOP PUBLICATION INDESIGN  5 Credits
Designed to use advanced applications utilizing all components of desktop publishing.

CS 223, PHOTOSHOP  5 Credits
Develops beginning skills using raster-based images. Recommended: CS 220.

CS 224, COMPUTER ILLUSTRATION  5 Credits
Introduces the techniques, technology, and theory of vector digital images in web, multimedia, digital video, and animation applications. Recommended: CS 220

CS 225, DIGITAL DESIGN A GAMING PERSPECTIVE  1-5 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.

CS 226, WEB DESIGN SPECIALIST I  5 Credits
Introduction to Web page design and development. Addresses issues concerning design and publishing Web sites.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
CS 227, WEB DESIGN SPECIALIST II 5 Credits
Introduction to basic Web technologies HTML, XHTML. Students also will work with popular production tools such as Microsoft Expression Web, and Adobe Dreamweaver.

CS 228, WEB DESIGN SPECIAL III 5 Credits
Designed to give proficiency in designing website utilizing: website templates, forms, rollovers, and basic animations and database-driven pages.

CS 229, DYNAMIC WEBSITE DESIGN WITH PHP MySQL 1-5 Credits
Provides knowledge and real-world applications about building interactive web sites. Students will learn how to build ecommerce interactive websites. Languages will include but will not be limited to: PHP, JSP and ASP.NET.

CS 230, VISUAL BASIC PROGRAMMING 5 Credits
Introduction to programming in Microsoft Visual Basic. Recommended: CS 121.

CS 231, APPLICATION DEVELOPMENT 5 Credits
Study of advanced word processing procedures and techniques using a case-study, project-based approach.

CS 235, INTRODUCTION TO DATABASE DESIGN 5 Credits
In-depth study of database theory and concepts including data modeling, database design, normalization, and data integrity and security. Recommended: CS 110.

CS 240, APPLICATION INTEGRATION USING VBA 5 Credits
Focuses on the functions of MS Office applications, integrating uses with Visual Basic for Applications.

CS 241, PROGRAMMING II (JAVA/C++) 5 Credits
Introduction and implementation of data structures including queues, stacks, trees and linked lists, using the Java or C++ programming language.

CS 242, ADVANCED SOFTWARE DEVELOPMENT 5 Credits
Use and investigate new software used by industry. Special attention will be given to software applications and operation. Students will develop and present a final project by developing a software systems analysis, creating an end product, with documented output, or system training and training materials. Students will also research relevant related specific topics and debate uses of different applications and computing issues.

CS 245, ADVANCED DATABASE DEVELOPMENT 5 Credits
Advanced study of database construction and operation. Recommended: CS 121.

CS 246, SQL AND RELATIONAL DATABASE PROGRAMMING 5 Credits
Database design concepts are applied in programming environment. Focuses on learning and applying the SQL programming language to efficiently define, access, update and retrieve information from a database in a server based environment.

CS 250, SITE DEVELOPMENT ASSOCIATE HTML V 5 Credits
The Site Development Associate course teaches students essential Web page development skills. This course teaches students to develop Web sites using HTML5 and CSS.

CS 251, ADVANCED COMPUTER DESIGN 5 Credits
Advanced techniques in computer graphic design principles and an introduction to lettering skills and typefaces.

CS 253, WEBSERVER MANAGEMENT 5 Credits
Survey of the tools, techniques, and best practices used to create, maintain, and manage a web server. Dozens of hands-on projects are used to facilitate valuable practice and simulate real-life scenarios experienced by network administrators.

CS 254, DIGITAL IMAGING PORTFOLIO 5 Credits
Explore and develop topics from Digital Publishing Occupational and Employment Development.

CS 255, MACINTOSH OPERATING SYSTEM 5 Credits
Explores the Macintosh Operating systems. Learn how to use the Apple operating systems such as Mac OS X. All basic operating system tools will be covered from virtual memory to specific use of Macintosh applications.

CS 260, UNIX/LINUX OPERATING SYSTEM 5 Credits
Introduction to multi-user and multi-processing operating systems through a study of the Linux/UNIX operating system as implemented on the microcomputer. Recommended: CS 125.

CS 265, CCNA 1 5 Credits
Provides an in-depth description of the IP network-addressing scheme, including sub-netting, and the design of IP addressing schemes for enterprise-wide networks.

CS 266, CCNA 2 5 Credits
Introduction to the configuration of Cisco routers using the proprietary IOS operating system.

CS 267, CCNA 3 5 Credits
In-depth coverage of the configuration and troubleshooting of Cisco routers in enterprise-wide networks.

CS 268, CCNA 4 5 Credits
The second part of a two-course series on the configuration and troubleshooting of Cisco routers in enterprise-wide networks.

CS 269, CCNP I 5 Credits
Explores advanced routing and using Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites.

CS 270, CCNP 2 5 Credits
Focuses on remote access to Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites. The second in a sequence of four courses that prepares students to take Cisco's CCNP certification exams.

CS 271, CCNP 3 5 Credits
Explores the design and building of Cisco multi-layer switched networks typically found at medium to large network sites. The third in a sequence of four courses that prepares students to take Cisco's CCNP certification exams.

CS 272, CCNP 4 5 Credits
Explores troubleshooting Cisco-based internetwork typically found at medium to large network sites.
Instructor permission, based on evaluation of Prerequisite:

Introduction and overview of all aspects of cosmetology. COSM 111, PRINCIPLES AND PROCEDURES I 1-11 Credits

team-building, and managing stress. skills, such as communicating, goal-setting, decision-making, knowledge and practice a variety of interpersonal and social assumption of leadership roles and responsibilities. Students will potential and abilities through small group discussions and Encourage students to develop awareness of their leadership CS 299, LEADERSHIP 1 Credit

student’s education and work experience. Covered in the standard computer technology curriculum. Project-oriented experiences in the area or applications not CS 297, FUND. OF NETWORK SECURITY 5 Credits

experience focusing on effective workplace relationships. CS 292, COOPERATIVE SEMINAR II 1-3 Credits

Provides experience in designing and building a local area network. CS 280, NOVELL SUSE SERVER 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 290, SYSTEM ANALYSIS AND DESIGN 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 291, CO-OP WORK EXPERIENCE II 1-5 Credits

Students explore issues related to their cooperative work experience focusing on effective workplace relationships. CS 292, COOPERATIVE SEMINAR II 1-3 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 297, SPECIAL PROJECTS 1-5 Credits

Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will 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. CS 299, LEADERSHIP 1 Credit

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

COSMETOLOGY

COSM 111, PRINCIPLES AND PROCEDURES I 1-11 Credits

Introduction and overview of all aspects of cosmetology. Prerequisite: Instructor permission.

COSM 112, PRACTICAL APPLICATION I 1-11 Credits

Introduction to the basic services of cosmetology. Prerequisite: Instructor permission.

COSM 121, PRINCIPLES AND PROCEDURES II 1-11 Credits

Introduction to basic services of cosmetology. Prerequisite: COSM 111.

COSM 122, PRACTICAL APPLICATION II 1-11 Credits

Continued practice of basic cosmetology skills on mannequins and models. Prerequisite: COSM 112.

COSM 131, INTERMEDIATE PRINCIPLES AND PROCEDURES I 1-11 Credits

Intermediate instruction in cosmetology. Prerequisite: COSM 121.

COSM 132, PRACTICAL APPLICATION III 1-11 Credits

Continued work to complete the required levels of performance, hour and quarter requirements, and safety/sanitation measures. Prerequisite: COSM 122.

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. 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

This course offers 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. 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
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

**CRIMINAL JUSTICE**

**CJ 101, INTRO CRIMINAL JUSTICE**  5 Credits
Examines the relationships and respective responsibilities of different criminal justice agencies. Recommended: READ 088. Formerly CJ 101, Introduction to Criminal Justice. [SS]

**CJ 105, INTRODUCTION TO CORRECTIONS**  5 Credits
Review of corrections field, tracing early American penal systems and philosophy to present day correctional programs. Recommended: READ 088.

**CJ& 110, CRIMINAL LAW**  3 Credits
Introduction to the ever-evolving world of criminal law in the United States. Formerly CJ 103, Intro to Criminal Law. Recommended: READ 088.

**CJ& 112, CRIMINOLOGY**  5 Credits
The study of deviant behavior as it relates to the definition of crime: crime statistics, theories of crime causation, crime typologies. Recommended: READ 088. Formerly CJ 106, Criminology. [SS]

**CJ 202, CRIME AND DELINQUENCY**  5 Credits
The development of criminal justice responses to formal handling of juveniles. Examination of the legal status of juvenile offenders and other related special conditions involving juveniles in crime and delinquency. Recommended: READ 088. [SS]

**CJ 204, CONSTITUTIONAL LAW**  5 Credits
Study of the Constitution of the United States, its provisions, and amendments. Recommended: READ 088 or higher.

**CJ 205, PRINCIPLES OF INVESTIGATION AND EVIDENCE**  5 Credits
Survey of fundamental investigative techniques and principles of evidence as they apply to specific criminal investigations. Prerequisite or Co-requisite: CJ& 101. Recommended: READ 088.

**CULINARY ARTS**

**CA 110, SERVSAFE**  3 Credits
Introduction to food production policies that will focus on current regulations, best practices and science-based information. **Prerequisite:** Instructor permission.

**CA 111, STOREROOM OPERATIONS**  3 Credits
Provides an introduction to operations of storerooms. Students will learn how to inventory, order and receive products for foodservice operations. They will be taught basic culinary math principles and identify various products used in production of food. **Prerequisite:** Instructor Permission.

**CA 112, INTRODUCTION TO CULINARY ARTS**  10 Credits
Provides an introduction to the hospitality and culinary arts profession through the History, Terminology and current Career Options. Classical knife skills are practiced and produced along with basic butchery of meats and seafood. Learn the techniques of classical and contemporary soups, stocks, mother sauces and their derivates. Roux based sauces, emulsions, purees, stock preparations and a variety of soups. **Prerequisite:** CA 112

**CA 120, CULINARY ARTS METHODS**  9 Credits
Develop basic skills and apply the principles of food safety and sanitation, workplace safety, food preparation, and cooking methodologies in a kitchen lab setting. Produce food products through various moist and dry heat cooking methods. **Prerequisite:** CA 120

**CA 121, AMERICAN REGIONAL CUISINE**  4 Credits
Practice techniques for appetizers, salads, desserts, batters, smoked, roasted and fried foods in the context of regional American specialties. **Prerequisite:** CA 120

**CA 122, FOOD, FARMERS, AND CULTURE**  4 Credits
Explores the relationship between food and culture. It examines the questions of what, when and where we eat in the context of the cultural systems which answer them. Work within our own greenhouse on production of food products, understanding seasonal growing patterns within the Northwest. Examination of culinary arts in context with the global food supply. Explores food sustainability issues, ethics, ecology, farming techniques, slow food, organics and their impact on food choices and selection by working chefs within the foodservice industry.

**CA 130, INTRODUCTION TO BAKING**  6 Credits
Introduction to modern baking and pastry arts. It will provide the theoretical and technical foundation for the entire program, covering kitchen safety and sanitation, knives and equipment, weights and measures.

**CA 131, ADVANCED BAKING AND PASTRY**  5 Credits
Building on information and skills developed in Introduction to Baking, this course will provide students with a thorough understanding of advanced baking techniques. **Prerequisite:** CA 130.

**CA 132, PLATED DESSERTS**  2 Credits
Examination of various methods for the design and plating of individual desserts. Students will learn techniques to enhance plate presentations, combine plating elements and balance flavors to reveal contemporary approaches to dessert service. **Prerequisite:** CA 131.
CA 133, FOOD AND WINE BEVERAGES 4 Credits
Introduction to the wine industry and grape varieties. Focus is on understanding the flavor components of different wines/beverages and their compatibility with various food offerings. This class is open to students under the age of 21 and students who do not drink alcoholic beverages.

CA 191, CO-OP WORK EXPERIENCE I 1-15 Credits
Opportunity to work in jobs directly related to the culinary arts industry. This formal training period is agreed upon by the student, employer and instructor. Prerequisite: Instructor permission. Co-requisite: CA 192.

CA 192, CO-OP SEMINAR I 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: CA 191. Instructor permission required.

CA 199, SPECIAL TOPICS 1-5 Credits
Study and train to meet established local needs in the culinary arts industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

CA 240, FRENCH AND MEDITERRANEAN COOKING 4 Credits
Learn and practice techniques for appetizers, salads, desserts, souffles, pasta, complex sauces, saute, frying, roasting, broiling, poaching and grilling in context with Classical French and Mediterranean specialties. Regions include France, Italy, Spain, Middle East and North Africa. Prerequisite: CA 120.

CA 241, ASIAN COOKING 4 Credits
Learn techniques and cooking methods for a variety of dishes from regions throughout Asia. Students will explore both traditional and contemporary applications for various ethnic dishes from these regions. Prerequisite: CA 120.

CA 242, NUTRITIONAL COOKING 4 Credits
Learn healthy techniques and cooking methods for a variety of dishes from regions throughout the world. Develop an understanding of the food pyramid, the values of calories from various sources and be able to run nutritional analysis on recipes. Prerequisite: CA 120.

CA 243, FOOD AND BEVERAGE MANAGEMENT 3 Credits
Designed to familiarize students with operational, marketing and managerial aspects of food and beverage management as well as their consequent managerial, marketing and cost control implications with emphasis on decision-making.

CA 250, GARDE MANGER 9 Credits
Learn techniques of cold and hot food preparation in buffet and catering applications, including appetizers, canapés, pate, sausages, terrines, buffet salads, buffet design, lay-out and execution and menu planning. Various curing, brining and smoking techniques in production of bacon and other cured meat products.

CA 251, LATIN AMERICAN COOKING 2 Credits
Practice techniques for appetizers, salads, desserts, batters, smoked, roasted and fried foods in the context of Latin American specialties. Prerequisite: CA 120.

CA 252, CULINARY TRENDS AND CONCEPTS 2 Credits
Practice techniques of sous vide, molecular gastronomy 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. 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 and 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. Co-requisite: CA 260 & CA 261.

CA 292, CO-OP 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.

CA 297, SPECIAL PROJECTS 1-15 Credits
Project-oriented experiences in the area or applications not covered in the standard culinary arts curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

DANCE 102, JAZZ AND FUNK DANCE 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. [PE]

DANCE 103, SWING DANCE 1 Credit
An energetic couples style of social dance, made popular by the swing music of the 1940’s. [PE]

DANCE 110, JAZZ II 2 Credits
Designed for intermediate dancer. Previous beginning jazz or ballet is required. [PE]
DANCE 111, SOCIAL/BALLROOM DANCING 1 Credit
Introduction to several different dance styles including the Foxtrot, Cha Cha, Swing, Waltz, and Rhumba. [PE]

DANCE 112, WESTERN/LINE DANCE 1 Credit
Learn different western line dances (done without a partner) and western swing (with a partner). [PE]

DANCE 160, MODERN/CONTEMPORARY DANCE I 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 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 2 Credits
Learning and practicing the fundamentals of rhythm and dance choreography. [PE]

DANCE 165, DANCE PRODUCTION I 2 Credits
Modern dance techniques with rehearsal and performance of student and faculty repertory. [Prerequisite: Instructor permission. [PE]

DANCE 168, DANCE PRODUCTION III 2 Credits
Modern techniques with Modern Jazz Combinations. Previous dance experience required. [Prerequisite: Instructor permission. [PE]

DANCE 169, CHOREOGRAPHY II 2 Credits
Modern techniques with Modern Jazz Combinations. Previous dance experience required. [Prerequisite: Instructor permission. [PE]

DANCE 170, TECHNICAL ASPECTS OF DANCE PRODUCTION 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. [PE]

DANCE 172, LATIN AND SALSA DANCE 1 Credit
Beginning level dance that focuses on the fundamental combinations and advanced level steps of Latin dances. No previous experience, special attire or footwear is required. [PE]

DANCE 174, SWING DANCE II 1 Credit
An energetic style of social dance, made popular by the swing music of the 1940s. [PE]

DANCE 177, ADVANCED JAZZ DANCE 2 Credits
Intensive study of advanced skills, techniques and choreography of various jazz, hip hop and funk styles. [Prerequisite: Instructor permission. [PE]

DANCE 180, HIP HOP I 1 Credit
Learn and practice hip hop/funk fundamentals and combinations. No previous experience required. [PE]

DANCE 181, HIP HOP II 1 Credit
An intermediate (advanced) level dance course to strengthen hip-hop movement and combinations. Hip hop styles similar to those seen on music videos will be taught. [Prerequisite: DANCE 180 or instructor permission. [PE]

DIESEL TECHNOLOGY

DT 151, SHOP FUNDAMENTALS/FORKLIFT TRAINING 1-9 Credits
Designed to introduce, perfect, and evaluate basic safety and shop skills necessary for successful completion of the Diesel Mechanics program. Students must be seeking a certificate or degree in Diesel Equipment Mechanics. [Prerequisite: Instructor permission.

DT 162, MACHINERY REPAIR I 10 Credits
Controlled laboratory experiences with static and live projects enhance instruction in engines, power trains, electrical and air conditioning. This class will emphasize ASE/NATEF competency completion. Students must be seeking a certificate or degree in Diesel Technology.

DT 163, MACHINERY REPAIR II 8 Credits
Controlled laboratory experiences with static and live projects enhance instruction in engines, power trains, electrical and air conditioning. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 180, SUSPENSION AND ALIGNMENT 1-5 Credits
Study of suspensions as found on medium and heavy duty vehicles. Alignment of axles and wheels is also covered. Topics include Alignment principles and terminology, Spring suspensions, Air suspensions, Beam suspensions, Tire wear identification, and wheel safety. This class will emphasize ASE/NATEF competency completion. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

DT 181, ENGINES I 14 Credits
In-depth study of diesel engines, including theory of operation, testing and rebuilding. Students must be seeking a certificate or degree in Diesel Equipment Mechanics. [Prerequisite: Instructor permission.

DT 183, ELECTRONICS I 1-5 Credits
Theory, troubleshooting, and repair of electrical systems are covered. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 185, DRIVE TRAINS 1-5 Credits
Study of the various components found in the power train system. This class will emphasize ASE/NATEF competency
completion. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

**DT 186, ADVANCED MECHANICS** 1-10 Credits
Study of specialized machinery. This class will emphasize ASE/NATEF competency completion. **Prerequisite:** Instructor permission.

**DT 187, HEATING AND AIR CONDITIONING** 5 Credits
Heating and air conditioning on medium and heavy duty vehicles. Topics include theory, components, refrigerants, servicing and troubleshooting. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 189, PREVENTIVE MAINTENANCE** 1-5 Credits
Study of preventive maintenance on medium and heavy duty vehicles. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 191, CO-OP 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. 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 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. 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. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 287, 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 299, LEADERSHIP** 1-10 Credits
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

**DRAMA**

**DRMA& 101, INTRO TO THEATRE** 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. Formerly THEA 101, Theatre Appreciation. [H]

**DRMA 151, BEGINNING ACTING I** 3 Credits
Introduction to acting techniques and beginning characterization through improvisation. Formerly THEA 151. [HP]

**DRMA 152, BEGINNING ACTING II** 3 Credits
Introduction to script analysis, scene study, and audition/monologue preparation with further exploration of acting including physical, vocal technique, theatrical makeup application, improvisation, and culminating with a public performance of a monologue and scene at the end of the quarter. **Prerequisite:** DRMA 151 or instructor permission. Formerly THEA 152. [HP]

**DRMA 153, BEGINNING ACTING III** 3 Credits
For advanced beginners. Continuing scene study and monologue work, further exploring acting with an emphasis on physical and vocal technique; especially Shakespeare and other heightened texts. Students will complete the course with public performance of a monologue and scene at quarter's end. **Prerequisite:** DRMA 152 or instructor permission. Formerly THEA 153. [HP]

**DRMA 154, ACTING-SUMMER MUSICAL I** 1-5 Credits
Designed to train students in the dramatic techniques appropriate to large stage, outdoor musical productions. Formerly THEA 154.
DRMA 155, ACTING-SUMMER MUSICAL II 1-5 Credits
Designed to train students in the dramatic techniques appropriate to large stage, outdoor musical productions. Formerly THEA 155.

DRMA 156, ACTING-SUMMER MUSIC III 5 Credits
Designed to train students in the dramatic techniques appropriate to large stage, outdoor musical productions. Formerly THEA 156.

DRMA 188, CHILDREN’S THEATRE 1-5 Credits
Designed for students aged nine years and older, to provide them with 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. Prerequisite: Instructor permission. Formerly THEA 190.

DRMA 191, PLAY PRODUCTION II 1-5 Credits
Applied study in acting, stage lighting, and costume construction. Prerequisite: Instructor permission. Formerly THEA 191.

DRMA 192, PLAY PRODUCTION III 1-5 Credits
Applied study in acting, stage lighting, and costume construction. Prerequisite: Instructor permission. Formerly THEA 192.

DRMA 225, REPRESENTATIVE PLAYS 5 Credits
A study of plays as an introduction to the literature and arts of the theater. Formerly THEA 225. [H]

DRMA 251, INTERMEDIATE ACTING I 3 Credits
Advanced acting techniques. Prerequisite: DRMA 153 or instructor permission. Formerly THEA 251. [HP]

DRMA 252, INTERMEDIATE ACTING II 3 Credits
Audition methods and preparation for advanced acting. Prerequisite: DRMA 251 or instructor permission. Formerly THEA 252. [HP]

DRMA 253, INTERMEDIATE ACTING III 3 Credits
Character analysis and preparation for advanced scene work. Prerequisite: DRMA 252 or instructor permission. Formerly THEA 253. [HP]

DRMA 281, BEGINNING PLAYWRITING 5 Credits
Introduces students to the elements, art and discipline of playwriting, by exploration of established works and creation of original one-act plays, scenes and monologues. By the course's conclusion, students will have completed a revised draft of a one-act play, and hear a scene from their plays read in a public performance. Prerequisite: ENGL 097 or instructor permission. [H]

DRMA 290, PLAY PRODUCTION IV 1-5 Credits
Applied study in acting, stage lighting, scenery, and costume construction. Prerequisite: Instructor permission. Formerly THEA 290. [HP]

DRMA 291, PLAY PRODUCTION V 1-5 Credits
Applied study in acting, stage lighting, scenery, and costume construction. Prerequisite: Instructor permission. Formerly THEA 291. [HP]

DRMA 292, PLAY PRODUCTION VI 1-5 Credits
Applied study in acting, stage lighting, scenery, and costume construction. Prerequisite: Instructor permission. Formerly THEA 292. [HP]

DRMA 297, TOURING THEATRE VI 3 Credits
A play for children will be cast, rehearsed, and performed in the schools of the four-county area. Formerly THEA 297. [HP]

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.

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. Recommended: READ 088. Formerly ECE 148.

ECED& 105, INTRO EARLY CHILD EDUCATION 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. READ 088

ECED& 120, PRACTICUM-NURTURING REL 2 Credits
In an early learning setting apply best practice for engaging in nurturing relationships with children. Focus on keeping children healthy and safe while promoting growth and development. Recommend: READ 088. Instructor permission required.

ECED& 132, INFANTS/TODDLERS CARE 3 Credits
Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care. Formerly ECE 240. Recommended: READ 088.

ECED& 134, FAMILY CHILD CARE 3 Credits
Learn the basics of home/family child care program management. Topics include: licensing requirements; business management; relationship building; health, safety, & nutrition; guiding behavior and; promoting growth & development. Recommend: READ 088.
### EARLY CHILDHOOD PARENT EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 050, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Provides student experience in an early care and education setting. **Prerequisite:** Instructor permission, successful completion of ECE 139 and ECE 291. Recommended: READ 088.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 255, CHILDREN AT RISK</td>
<td>1-3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Caring for children from families affected by substance abuse. Recommended: READ 088. Student may not earn credit for both ECE 255 and ED 255.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 291, CO-OP WORK EXPERIENCE II</td>
<td>1-3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Opportunity to participate in hands-on training in the early childhood field. This formal training period is agreed upon by the student, employer, and instructor. **Prerequisite:** Instructor permission. Recommended: READ 088.

### EARLY CHILDHOOD PARENT EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 040, BABY AND YOU I</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Observation and classroom experience for parents and infants birth to 12 months.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 041, BABY AND YOU II</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Observation and classroom experience for parents and infants birth to 12 months.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 042, BABY AND YOU III</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Observation and classroom experience for parents and infants birth to 12 months.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 049, PARENT COOPERATIVE PRESCHOOL</td>
<td>1 Credit</td>
<td></td>
</tr>
<tr>
<td>ECPE 050, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Group observation and participation experience for parents of one year-olds to study and discuss relevant parenting topics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 051, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Group observation and participation experience for parents of one year-old children to study and discuss relevant parenting topics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 052, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Group observation and participation experience for parents of one year-old children to study and discuss relevant parenting topics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 053, TOT SPOT</td>
<td>1-3 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- This parent education course provides an opportunity to discuss relevant parenting topics, share common concerns, and research current practices.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 060, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Provides an opportunity to discuss and study relevant parenting topics for parents of two year olds.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 061, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Group observation and participation experience for parents of 24-36 month old children to study and discuss relevant parenting topics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPE 062, PARENT TODDLER RELATIONS</td>
<td>2 Credits</td>
<td></td>
</tr>
<tr>
<td>ECE 239, TEACHING YOUNG CHILDREN II</td>
<td>3 Credits</td>
<td></td>
</tr>
</tbody>
</table>

- Group observation and participation experience for parents of 2 year-old children to study and discuss relevant parenting topics.

---

**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**
ECPE 070, PARENT TODDLER RELATIONS 2 Credits
Group observation and participation experience for parents of three year old children to study and discuss relevant parenting topics.

ECPE 071, PARENT TODDLER RELATIONS 2 Credits
Group observation and participation experience for parents of three year-old children to study and discuss relevant parenting topics.

ECPE 072, PARENT TODDLER RELATIONS 2 Credits
Group observation and participation experience for parents of three year-old children to study and discuss relevant parenting topics.

ECPE 100, PARENT CO-OP PRESCHOOL 1-3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Students participate in lab session with children each week.

ECPE 101, PARENT CO-OP PRESCHOOL 1-3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Students participate weekly in lab sessions with children.

ECPE 102, PARENT CO-OP PRESCHOOL 1-3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Students participate weekly in lab session with children.

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.

ECONOMICS

ECON 200, SURVEY OF ECONOMICS 5 Credits
Economic principles and concepts related to solving economic problems encountered by individuals at the firm or household level up to the national level. [SS]

ECON& 201, MICRO ECONOMICS 5 Credits
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Student may not earn credit for both ECON& 201 and AGRI 201. Formerly ECON 202, Fundamentals of Microeconomics. [SS]

ECON& 202, MACRO ECONOMICS 5 Credits
Theory and policy related to organization and operation of a market economy. Formerly ECON 201, Fundamentals of Macroeconomics. [SS]

EDUCATION

EDUC 106, TUTOR TRAINING 1 Credit
Provides training in the fundamental skills useful to peer tutors of mathematics, science and writing. Through lectures, class discussions, and activities; students will be introduced to the academic and personal skills that characterize effective tutors. Course will meet for one hour per week.

EDUC 111, TEACHING AND LEARNING LAB 1-3 Credits
Designed for future teachers and those pursuing a degree in education related field. Students will volunteer in a school setting to satisfy entry requirements of Teacher Education Program at four-year institutions. Students must volunteer 30 hours per credit. **Prerequisite:** EDUC& 202 or instructor permission. Recommended: READ 088.

EDUC& 115, CHILD DEVELOPMENT 5 Credits
Build a functional understanding of the foundation of child development, prenatal to early adolescence. Observe and document physical, social, emotional, and cognitive development of children reflective of cross cultural and global perspectives. Recommended: READ 088. Formerly EDUC& 114, Child Development.

EDUC& 130, GUIDING BEHAVIOR 3 Credits
Examine the principles and theories promoting social competence in your children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences. Recommend: 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. Recommend 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 5 Credits
Explores units on teaching as a profession, as well as the history and philosophy of education. Recommended: READ 088. Formerly ED 110, Introduction to Education. [SS]

EDUC& 203, EXCEPTIONAL CHILD 3 Credits
Explore characteristics, history and legislation relating to children with special needs. Recommended: READ 088. Student may not earn credit for both EDUC& 203 and ECE 155. Formerly ED 155, Introduction to Exceptional Student.

EDUC 297, SPECIAL PROJECTS 1-10 Credits
Project-oriented experiences in the area or applications not covered in the standard education paraprofessional curriculum. **Prerequisite:** Instructor permission, based on evaluation of student’s education and work experience.

EDUC 299, SPECIAL TOPICS 1-5 Credits
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
ENITY SYSTEMS TECHNOLOGY

EST 100, REFRIGERATION AND AIR CONDITIONING BASICS I 5 Credits
Provides student an understanding of properties and laws of energy and physics that allow the electrical and refrigeration processes to work while learning industry related safety, trade tools, types of fasteners, copper tube bending, flaring, soldering and brazing, and pipe threading.

EST 101, REFRIGERATION AND AIR CONDITIONING BASICS II 5 Credits
Explores the basics of calibrating trade instruments, environmental management of refrigerants and refrigeration oils. Labs will include window air conditioners, PTAC and PTHP operation, recovery, evacuation and charging techniques in the lab, use of digital temperature meters and gauge manifold to determine operating parameters. 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
Covers terminology of electrical materials, connectors, fasteners, and hardware.

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 AND AIR CONDITIONING MECH EQUIPMENT 6 Credits
Mechanical equipment used in the refrigeration and air conditioning trade and practice on proper troubleshooting and repair methods are covered. Prerequisite: EST 100 or 101; or instructor permission.

EST 115, INDUSTRIAL MECHANICS/MAINTENANCE WIND MACHINES 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 6 Credits
Applies psychometrics to residential and light commercial package and split comfort air conditioner systems. Air Conditioning system installation and operating parameters in a Green Environment will be covered with emphasis on electrical and mechanical component operation and safety, compliance with NEC and the UMC will be taught to include maintenance, troubleshooting and repairs in typical AC 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 ELECTRIC 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:** EST 132 and passing grade of C or higher in EST 131 or instructor permission.

**EST 133, INTRODUCTION TO CONTROLS** 1-6 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~AE and electrical safety.

**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~AE 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 MOTOR AND MOTOR MAINTENANCE** 6 Credits
The practical aspects of types and applications of single and three phase motors motor controls are covered. Applied electrical symbols, wiring diagrams, basic motor operation, connection wiring, testing and maintenance of motors, automatic and electronic motor controls. **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, AND MATERIAL HANDLING** 5 Credits
Designed to teach the techniques of safely lifting and moving loads of various shapes, sizes, and types. Also covered is tooling, and hand and radio signals. **Prerequisite:** EST 100 or EST 103 or EST 108 or Instructor Permission.

**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, CO-OP WORK EXPERIENCE** 1-18 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, 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: EST 191.

**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 biogas, 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.

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. Prerequisite: EST 132

EST 240, INTRODUCTION 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, transistors, transducers, photocells, transistor, SCR, Diac, Triac, SS relays, photoelectric and proximity controls. Prerequisite: EST 131 and grade of C or higher in EST 132, or instructor permission.

EST 250, INTRODUCTION TO PLC AND DDC CONTROL  5 Credits
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 controllers, and be introduced to DDC components, functions and operation in building automation and energy management. Prerequisite: EST 150 and grade of C or higher in EST 240 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 264, HEAT SYSTEMS AND HEAT PUMPS  8 Credits
An operational understanding required to perform the installation, maintenance and repair of residential and light commercial heating equipment to include operation and analysis of electrical and mechanical components for: electric heat, gas heat, oil heat, hydronic heat and air to air heat pump and water to air heat pump. Student will learn electrical, gas piping, and venting requirements per code requirements. National Certification exams will be given in electric heat, gas heat and heat pumps. Prerequisite: EST 120 or instructor permission.

EST 265, COMMERCIAL REFRIGERATION EQUIPMENT  8 Credits
Explores design and operational requirements of low and medium temperature commercial refrigeration systems. 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 270, WIND POWER PLANT OPERATIONS AND ADVANCED MECH 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 285, INTRODUCTION 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, CO-OP 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. Co-requisite: EST 191.

**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  
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

**ENT 112, BLUEPRINT READING**  
2 Credits  
Introduction to basic construction plan interpretation. Emphasis is on symbol usage, line types, dimensioning, section views, axillary views, and integration of construction plans from various trades.

**ENT 121, COMPUTER AIDED DRAFTING**  
3 Credits  
Introduction to engineering drawings using AutoCAD in the solution of a variety of graphic problems. **Prerequisite:** ENGR& 111 or instructor permission. Formerly CET 151, Computer Aided Drafting.

**ENT 122, ADVANCED COMPUTER AIDED DESIGN**  
3 Credits  
Introduction to three-dimensional computer aided drafting and design using Civil 3D software. **Prerequisite:** ENT 121 or instructor permission. Formerly CET 152

**ENT 123, COMPUTER AIDED 3-D MODELING**  
3 Credits  
Introduction to three-dimensional computer aided drafting and design using AutoCAD 3D modeling software. **Prerequisite:** ENT 121 or instructor permission

**ENT 131, CONSTRUCTION MATERIALS**  
4 Credits  
Introduction to the fundamental principles of materials commonly used for engineering projects. Course includes laboratory tests. Formerly CET 242.

**ENT 132, SOIL MECHANICS FOR CONSTRUCTION**  
4 Credits  
Introduction to the fundamental principles of soil mechanics as it relates to engineering design. Course includes laboratory tests. Formerly CET 224.

**ENT 141, ESTIMATING**  
3 Credits  
Introduction to the fundamental principles of identifying and estimating construction costs. Formerly CET 100.

**ENT 150, INTRODUCTION TO GIS**  
3 Credits  
Introduction to the fundamentals of GIS and GPS using ESRI ArcGIS for Desktop software. Formerly CET 250.

**ENT 151, ADVANCED GIS**  
3 Credits  
Instruction in advanced topics of GIS using ESRI ArcGIS for Desktop software. **Prerequisite:** ENT 161 and ENGR& 111, or instructor permission. Formerly CET 251

**ENT 161, ELEMENTARY SURVEYING**  
3 Credits  
Introduction to the fundamental principles of plane surveying. Course includes field laboratory activities. Co-requisite: OCSUP 107, MATH& 141, or instructor permission. Formerly CET 160.

**ENT 162, INTERMEDIATE SURVEYING**  
5 Credits  
Instruction in intermediate levels of plane surveying. Course includes field laboratory activities. Pre-requisite: ENT 161 or instructor permission.

**ENT 163, ADVANCED SURVEYING**  
5 Credits  
Instruction in advanced levels of plane surveying and introduction to geodetic surveying. Course includes field laboratory activities and a final project. **Prerequisite:** ENT 162 or instructor permission. Formerly CET 161.

**ENT 191, CO-OP WORK EXPERIENCE**  
1-18 Credits  
Opportunity to work in jobs directly related to the civil engineering industry. This formal training period is agreed upon by the student, employer, and instructor. **Prerequisite:** Instructor permission. Formerly ENT 191.

**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 199, SPECIAL TOPICS**  
1-5 Credits  
Study and train to meet established local needs in the civil engineering industry, supplemental to courses currently offered. **Prerequisite:** Instructor permission. Formerly CET 199.

**ENT 201, ENGINEERING CONSTRUCTION MANAGEMENT**  
4 Credits  
Introduction to the fundamental principles of construction administration for construction managers and design engineers. Course includes group activities. Formerly CET 201.

**ENT 202, CONSTRUCTION INSPECTION**  
3 Credits  
Introduction to the fundamental principles of construction inspection for engineering projects. Course includes site visits and oral and written reports. Formerly CET 202.

**ENT 211, HYDRAULICS**  
5 Credits  
Introduction to the fundamental principles of fluid characteristics and the related impact on engineering design. **Prerequisite:**
OCSUP 107, MATH& 141, or instructor permission. Formerly CET 223

ENT 212, HYDROLOGY 5 Credits
Introduction to the fundamental principles of analysis and design of storm water conveyance systems. Prerequisite: ENT 211 or instructor permission. Formerly CET 166.

ENT 221, ENGINEERING MECHANICS-STATICS 5 Credits
Instruction in the fundamental principles of the mechanics of rigid bodies. Prerequisite: OCSUP 107, MATH 142, or instructor permission. Student may not earn credit for both ENT 221 and ENGR& 214. Formerly CET 220.

ENT 222, ENGINEERING MECHANICS-STRENGTH OF MATERIALS 5 Credits
Instruction in the fundamental principles of internal stress, strain, deflection, and deformation of structural members. 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. Course includes a final project. Prerequisite: ENT 162 or instructor permission. Formerly CET 263.

ENT 232, PAVEMENT DESIGN 3 Credits
Introduction to fundamental principles of pavement design. 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 Prerequisites: ENT 163 and ENGR& 225. Formerly CET 221

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 292

ENT 297, SPECIAL PROJECTS 1-18 Credits
Project-oriented experiences in the area or applications not covered in the standard civil engineering technology curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience. Formerly CET 297.

ENGR& 111, ENGINEERING GRAPHICS 1 4 Credits
Introduction to basic engineering graphic concepts, plan interpretation, and computer drafting skills. Formerly CET 141, Engineering Graphics.

ENGR& 214, STATICS 5 Credits
Fundamental principles of the mechanics of rigid bodies will be explored. This course is calculus based. Co-requisite: MATH& 152. Student may not earn credit for both ENGR& 214 and ENT 221. 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 on internal stress, deflections, and deformation of structural members. Prerequisite: ENGR& 214. Students may not earn credit for both ENGR& 225 and ENT 222. Formerly CET 222, Engineering Mechanics-Strength of Materials.

ENGL 077, WRITING FUNDAMENTALS II 5 Credits
Focuses on key elements of grammar, sentence structure, and composition of a well-developed paragraph. Prerequisite: Appropriate placement score and writing sample. Formerly ENG 077.

ENGL 087, WRITING ESSENTIALS 5 Credits
Focuses on basic grammar conventions and mechanics; how to think critically; how to construct and combine sentences; how to organize and develop ideas; how to write paragraphs; and basic editing and proofreading skills. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 077. Formerly ENG 087.

ENGL 097, BASIC EXPOSITORY WRITING 5 Credits
Focuses on the composition of well-developed paragraphs and essays, the writing process, basic grammar, and critical thinking. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087.

ENGL& 101, ENGLISH COMPOSITION I 5 Credits
Focuses on the development of structural and stylistic writing skills with concentration on expository, critical, analytical, and persuasive essay techniques. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Formerly ENG 101, English Composition I. [C]

ENGL& 102, ENGLISH COMPOSITION II 5 Credits
Focuses on the unique process of writing an academic research paper that addresses the concerns of a research community. Prerequisite: Grade of C or higher in ENGL& 101. Formerly ENG 102, English Composition II. [C]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 104</td>
<td>ADVANCED ENGLISH COMPOSITION</td>
<td>5</td>
<td>Students learn to compose college-level essays with a special emphasis given to good style. The principles of good writing style will be taught, and the prose of accomplished stylists studied. Besides learning to compose essays, the student will become a more capable stylist. [C]</td>
</tr>
<tr>
<td>ENGL 111</td>
<td>INTRO TO LITERATURE</td>
<td>5</td>
<td>Examines poetry, fiction, drama, and non-fiction. Formerly LIT 140, Intro to Literature. [H]</td>
</tr>
<tr>
<td>ENGL 112</td>
<td>INTRO TO FICTION</td>
<td>5</td>
<td>Examines short fiction from the 19th century to the present, drawn from a variety of countries and cultures. Formerly LIT 141, Intro to Fiction. [H]</td>
</tr>
<tr>
<td>ENGL 113</td>
<td>INTRO TO POETRY</td>
<td>5</td>
<td>Emphasizes the interpretation and appreciation of poetry in its various forms. Formerly LIT 142, Intro to Poetry. [H]</td>
</tr>
<tr>
<td>ENGL 115</td>
<td>ARTHURIAN LITERATURE</td>
<td>3</td>
<td>Examines selected Arthurian legends found in literature, film, music and art from the middle ages to the modern period. Formerly LIT 111. [H]</td>
</tr>
<tr>
<td>ENGL 118</td>
<td>BASEBALL LITERATURE AND AMERICAN CULTURE</td>
<td>5</td>
<td>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. [H]</td>
</tr>
<tr>
<td>ENGL 130</td>
<td>CREATIVE WRITING II</td>
<td>3</td>
<td>Literary techniques and forms and encourages writing of original works of fiction and poetry will be explored. Formerly ENG 130.</td>
</tr>
<tr>
<td>ENGL 140</td>
<td>CREATIVE WRITING III</td>
<td>3</td>
<td>Literary techniques and forms and encourages writing of original works of fiction and poetry will be explored. Formerly ENG 140.</td>
</tr>
<tr>
<td>ENGL 144</td>
<td>INTRODUCTION TO FILM</td>
<td>5</td>
<td>Examines selected films with emphasis on the variety of film types, techniques, and developing technology. Formerly LIT 144. [H]</td>
</tr>
<tr>
<td>ENGL 147</td>
<td>COMIC BOOKS AND GRAPHIC NOVELS</td>
<td>5</td>
<td>Study of comics from superhero to autobiography through close examination of graphic literature from the past and present. Formerly LIT 147. [H]</td>
</tr>
<tr>
<td>ENGL 149</td>
<td>CLASSIC CHILDREN’S LITERATURE</td>
<td>5</td>
<td>Examines literary fiction directed to children. Formerly LIT 149. [H]</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>MYTH AND FOLKLORE ÂD</td>
<td>5</td>
<td>Examines the myths and folktales of the world with an emphasis on literature and culture. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly LIT 210. [H][D]</td>
</tr>
<tr>
<td>ENGL 212</td>
<td>AFRICAN-AMERICAN LITERATURE</td>
<td>3</td>
<td>Focuses on the study of major African-American writers. Formerly LIT 212. [H]</td>
</tr>
<tr>
<td>ENGL 236</td>
<td>CREATIVE WRITING I</td>
<td>5</td>
<td>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 or successful completion of ENGL 097.</td>
</tr>
<tr>
<td>ENGL 245</td>
<td>AMERICAN LITERATURE ÂD</td>
<td>5</td>
<td>Examines influential American literary voices and styles from settlement times through the present. Formerly LIT 245. [H][D]</td>
</tr>
<tr>
<td>ENGL 246</td>
<td>LITERATURE OF THE BRITISH ISLES</td>
<td>5</td>
<td>Examines key literary texts by authors of the British Isles including England, Scotland, Ireland, and Wales from the years 700 to about 1945. [H]</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>VOICES OF WOMEN IN LITERATURE ÂD</td>
<td>5</td>
<td>Surveys women writers across time and cultures. 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. [H][D]</td>
</tr>
<tr>
<td>ENGL 257</td>
<td>LITERATURE OF THE INLAND N.W.</td>
<td>5</td>
<td>Examines the historical and contemporary literature of the Inland Northwest in fiction, poetry, personal memoir, and letters. Formerly LIT 257. [H]</td>
</tr>
<tr>
<td>ENGL 261</td>
<td>NATIVE AMERICAN LITERATURE</td>
<td>3</td>
<td>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. [H]</td>
</tr>
<tr>
<td>ENGL 265</td>
<td>WORLD LITERATURE ÂD</td>
<td>5</td>
<td>Ancient and modern great literature from around the world, featuring poetry, story, and drama. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly LIT 265. [H][D]</td>
</tr>
<tr>
<td>ENGL 270</td>
<td>DETECTIVE AND SPY LITERATURE</td>
<td>5</td>
<td>Surveys selected thriller literature from 1840 to the present. Formerly LIT 270. [H]</td>
</tr>
<tr>
<td>ENGL 271</td>
<td>SCIENCE FICTION AND FANTASY LITERATURE</td>
<td>5</td>
<td>Examines science fiction and fantasy genres with an emphasis on their emergence as significant literature. Formerly LIT 271. [H]</td>
</tr>
<tr>
<td>ENGL 277</td>
<td>THE BIBLE AS LITERATURE</td>
<td>5</td>
<td>A literary survey of stories and poetry found in the Bible. Formerly LIT 277. [H]</td>
</tr>
<tr>
<td>ESL 001</td>
<td>EDUCATIONAL INTERVIEW</td>
<td>1</td>
<td>Learner-focused college readiness course designed to provide English as Second Language learners with an understanding of college culture, learning needs and goal setting. Course has fully developed modules of instruction and is offered as a computer enhanced course.</td>
</tr>
</tbody>
</table>
ENGLISH AS A SECOND LANGUAGE

ESL 005, ESL LEVEL I  
Offered to non-literate, pre-literate, or semi-literate students. Students will improve reading, writing, speaking, listening, and grammar in life skills contexts such as providing personal information, describing daily events, and identifying jobs and work-related abilities. **Prerequisite:** Placement by CASAS oral screen.

ESL 010, ESL LEVEL II  
Offered to students who are literate in their own language or progressed from ESL 005. Students will be able to read simple texts and write simple sentences. **Prerequisite:** Placement by CASAS or completion of ESL 005.

ESL 012, ESL WRITING I  
Based on the fundamentals of English grammar, progresses from vocabulary development to sentence-level grammatical instruction within the context of a wide range of personally relevant topics. **Prerequisite:** Placement by CASAS or completion of ESL 005.

ESL 013, ESL WRITING II  
Students write narrative descriptions on familiar culturally relevant topics. Focuses on the fundamentals of English grammar, and progresses from vocabulary development to sentence-level grammatical instruction and structured paragraphs. **Prerequisite:** CASAS score of 211 or higher.

ESL 014, ORAL COMMUNICATION  
For students needing skills in verbal communication at a basic level. Students use familiar oral phrases, questions and social conversations to increase both speaking and listening comprehension. **Prerequisite:** CASAS placement score of 181-210.

ESL 015, COMMUNICATION  
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. **Prerequisite:** CASAS placement score of 211 and above.

ESL 020, ESL LEVEL III  
Enables students to satisfy survival needs and routine work and social demands. Focuses on skills needed independently to accomplish simple, well defined, and structured reading, writing, speaking, and listening skills needed to communicate in English. Placement by CASAS or completion of ESL 010.

ESL 030, ESL LEVEL IV  
Focuses on skills needed to independently accomplish simple, well defined, and structured reading, writing, speaking, and listening skills needed to communicate. **Prerequisite:** Placement by CASAS or completion of ESL 020. Students may co-enroll in IBEST courses with permission of the Transitional Studies Department.

ESL 040, ESL LEVEL V  
Focuses on skills needed to independently accomplish well defined and structured reading, writing, speaking and listening skills needed to communicate in English. **Prerequisite:** Placement by CASAS or completion of ESL 030. Student may co-enroll in I-BEST courses with the permission of the Transitional Studies Department.

ESL 040A, ESL CONTEXT READING  
Course is aligned with outcomes for WA Adult Reading Learning Standard ESL V. This course develops reading techniques for advanced ESL 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 215-235 and writing assessment are used for placement. Students with an end of quarter CASAS score of 236 and above, and a grade of A may qualify for READ 88 or College Level Reading. Instructor permission required.

ESL 040B, ESL CONTEXT WRITING  
This course is needed to support ESL students with a goal to pursue an academic or vocational pathway. Students apply academic writing concepts addressed in ENGL 077, thus providing opportunities to work toward College level English faster. The course also provides students with an introduction to on-line course work within a supported environment. Instructor permission required.

ESL 040C, ESL IDEA  
Integrated Digital English Acceleration classes prepare ESL I-3 students for entry into I-BEST and other post-secondary programs. 30 instructional strands focus on English language instruction using an information literacy approach that aids students learn to learn language and locate information within a variety of contexts. The instructional design uses the flipped classroom model that provides online opportunities for students to gain foundational knowledge before coming to class, where they will apply the knowledge in project and problem-based activities. At least 50 percent of the instruction uses digital learning resources and include opportunities for self-directed learning. Instructor permission required.

ESL 052, ESL WRITING DEVELOPMENT  
Writing narrative descriptions and short essays on familiar topics such as customs in native country. **Prerequisite:** CASAS (form 20) 210.

ESL 060, MULTI-LEVEL ESL  
Offered for ESL students in levels I-VI. Student-centered instruction designed to develop language proficiency in reading, writing, speaking, and basic numeracy.

ESL 066, E-LEARNING FOR ESL  
Designed for ESL 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.

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

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV 101</td>
<td>ESTABLISHING A VINIFERA VINEYARD</td>
<td>4</td>
<td>Designed to provide the student an introduction to the processes of establishing a vineyard. <strong>Prerequisite:</strong> Successful completion of EV 107, Viticulture Practicum II.</td>
</tr>
<tr>
<td>EV 102</td>
<td>MAINTAINING A VINIFERA VINEYARD</td>
<td>5</td>
<td>Provides the skills necessary for maintaining the vineyard from the point of dormancy through the harvest. Grade C or higher in EV 101.</td>
</tr>
<tr>
<td>EV 107</td>
<td>INTRODUCTION TO VITICULTURE AND ENOLOGY</td>
<td>5</td>
<td>A survey of the different viticultural and winemaking practices employed in wine production during harvest. Additionally, basic sensory analysis of wine will be performed to begin the process of palate training. <strong>Prerequisite:</strong> Instructor permission.</td>
</tr>
<tr>
<td>EV 108</td>
<td>WINE INDUSTRY MARKETPLACE</td>
<td>3</td>
<td>Provides insights and experiences necessary to become not only a successful job applicant, but an informed and knowledgeable wine industry participant.</td>
</tr>
<tr>
<td>EV 113</td>
<td>ADVANCED CANOPY MANAGEMENT</td>
<td>2</td>
<td>Designed to provide a fuller understanding of grape canopy management and functionality with emphasis on those operations that will maximize fruit quality.</td>
</tr>
<tr>
<td>EV 131</td>
<td>ESSENTIALS OF WINE COMPLIANCE</td>
<td>2</td>
<td>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).</td>
</tr>
<tr>
<td>EV 140</td>
<td>WRITING FOR THE WINERY</td>
<td>2</td>
<td>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&amp; 101 recommended</td>
</tr>
<tr>
<td>EV 141</td>
<td>INTRODUCTION TO WINE MARKETING</td>
<td>3</td>
<td>Introduces the student to the challenges of marketing wine in today’s competitive arena and examines all the elements of successfully marketing a wine.</td>
</tr>
<tr>
<td>EV 142</td>
<td>DIRECT TO CONSUMER WINE MARKETING</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>EV 175</td>
<td>VINEYARD AND WINERY SPANISH</td>
<td>1-3</td>
<td>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.</td>
</tr>
<tr>
<td>EV 180</td>
<td>WINES OF THE WORLD</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>EV 189</td>
<td>SENSORY ANALYSIS OF WINE</td>
<td>3</td>
<td>Sensory analysis specific to wine production. The lecture will focus on the effect of appearance on taste perception as well as olfactory and taste transduction mechanisms. The lab portion will focus on specific wine varietals, use of oak in winemaking, secondary fermentation characteristics and individual wine component threshold identification. The overall purpose of the course is to help students to train their palates to make informed decision making during wine production. <strong>Prerequisite:</strong> EV 107. Recommended: EV 203.</td>
</tr>
<tr>
<td>EV 193</td>
<td>WINERY OPERATIONS MANAGEMENT</td>
<td>3</td>
<td>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. <strong>Prerequisite:</strong> EV 107 Intro to Viticulture and Enology and successful completion of OCSUP 105 or higher.</td>
</tr>
<tr>
<td>EV 194</td>
<td>WEATHER FOR VITICULUTRISTS</td>
<td>2</td>
<td>Outlines basic principles of weather and specifically the seasonal patterns that affect the Pacific Northwest.</td>
</tr>
<tr>
<td>EV 196</td>
<td>VITICULTURE PRACTICUM I</td>
<td>1</td>
<td>Provides students with hands-on learning experiences while assigned to a selected vinifera vineyard manager. Must be enrolled in the Viticulture program.</td>
</tr>
<tr>
<td>EV 197</td>
<td>VITICULTURE PRACTICUM II</td>
<td>1</td>
<td>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. <strong>Prerequisite:</strong> Grade C or higher in EV 196.</td>
</tr>
<tr>
<td>EV 198</td>
<td>VITICULTURE PRACTICUM III</td>
<td>1</td>
<td>This is the third quarter of viticulture practicum which provides students with hands-on learning experiences while assigned to a selected vinifera vineyard manager. Must be enrolled in the Viticulture program. <strong>Prerequisite:</strong> Must be enrolled in the Viticulture program. <strong>Prerequisite:</strong> Grade C or higher in EV 197, Viticulture Practicum II.</td>
</tr>
<tr>
<td>EV 199</td>
<td>SPECIAL TOPICS</td>
<td>1-6</td>
<td>Study and train to meet established local needs in the enology and viticulture industry, supplemental to courses currently offered <strong>Prerequisites:</strong> Current enrollment in the Enology program and instructor permission.</td>
</tr>
</tbody>
</table>

For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
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, MATH 065 (class no longer offered) or MATH 074C, 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 LICENSE FOR VITICULTURE 1 Credit
Preparation for the State of Washington Private Applicator’s pesticide licensing exam with a special focus on wine grapes.

EV 286, WINEMAKING PRACTICUM I 3 Credits
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 Prerequisites: Must be enrolled concurrently in EV 203 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: Grade C or higher in 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
Encourages students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

ENVIRONMENTAL SCIENCE

ENVS& 101, INTRO TO ENVIRONMENTAL SCIENCE 5 Credits
Provides a study of natural and modified systems and their interactions with humans and other living organisms. 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. [NS]

ENVS 150, ISSUES IN ENVIRONMENTAL SCIENCE-HONORS 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.

ETHNIC STUDIES

ETH 110, AFRICAN-AMERICAN STUDIES 3 Credits
Critically examines the impact of social, economic, political, educational and penal policies on African American Citizens from 1950 to present.

FARRIER SCIENCE

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.

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, CO-OP 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 SHOEING 1-18 Credits
Introduction to basic horse shoeing and forge work. Includes basic anatomy, basic balance, and basic shoeing. Introduction to basic horse shoeing and forge work. Includes basic anatomy, basic balance, and basic shoeing.
FRR 195, INTERMEDIATE SHOEING 1-18 Credits
Hands-on shoeing and forge work experience with live horses. **Prerequisite:** FRR 194.

FRR 197, ADVANCED SHOEING 1-18 Credits
Hands-on shoeing experience with live horses. **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 PREP AND SHOEING 1-16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. **Prerequisite:** FRR 197 or instructor permission.

FRR 255, ADVANCED FORGING-HANDMADE SHOE UNIT 1-16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. The student applies hand made shoes with clips. **Prerequisite:** FRR 245 or instructor permission.

FRR 283, THERAPEUTIC SHOEING 1-16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. **Prerequisite:** FRR 255 or instructor permission.

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.

FRR 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.

FIRE SCIENCE

FCA 100, INTRODUCTION TO FIREFIGHTING 4 Credits
Provides an overview of the fire service and the role of the firefighter. Students must have acceptance into the Fire Science Program to enroll.

FCA 111, FUNDAMENTALS OF FIREFIGHTING 5 Credits
Provides an introduction to firefighting fundamentals according to National Fire Protection Association (NFPA) standards and includes a practicum element.

FCA 115, ADVANCED FIREFIGHTING 8 Credits
Taught according to the standards of the National Fire Protection Association (NFPA) and is the final segment in the FCA 111, FCA 113, and FCA 115 series. **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. **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. **Prerequisite:** FCA 115. Recommended: MATH 065 (Course no longer offered) or MATH 74C.

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. **Prerequisite:** FCA 100 or instructor permission.

FCA 152, BUILDING CONSTRUCTION 3 Credits
Overview of building construction engineering principles, fire and life safety concerns, hazardous materials/techniques, and related design factors. **Prerequisite:** FCA 115 or instructor permission.

FCA 155, FIRE INSTRUCTOR I 3 Credits
The study, analysis, application and evaluation of teaching/instructional methodology. 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. **Prerequisite:** FCA 115 or instructor permission.

FCA 170, HAZMAT OPERATIONS 3 Credits
Preparation for IFSAC HAZMAT Operations level examination. Meets the requirements of OSHA 1910.120 and NFPA 472 Awareness and Operations level core competencies.

FCA 177, WILDLAND 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. 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. **Prerequisite:** FCA 115 or instructor permission.

FCA 299, LEADERSHIP 3 Credits
Introduces the Fire Science student to leadership and influencing skills among emergency personnel. **Prerequisite:** FCA 115 or instructor permission.

FRENCH

FRCH& 121, FRENCH I 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. Formerly FREN 101, French I. [H]

FRCH& 122, FRENCH II 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...
GED® PREPARATION

GED® SKILL BUILDING 1-10 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® 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. 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 following the Underage Admissions policy, which is available in the Student Development Center.

GED 105, PHYSICAL GEOGRAPHY 5 Credits
Introduces all aspects of earth systems, identifying physical phenomena and stressing their distribution and 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. [NS]

GED 170, INTRODUCTION TO MAPS AND CARTOGRAPHY 5 Credits
Introduction to the history, descriptive and graphic language, types, and interpretation of maps. 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. [NS]

GED 201, INTRODUCTION TO WORLD REGIONAL GEOGRAPHY 5 Credits
A study of the countries, regions, and people of the world and their interrelationships with their physical and cultural environments. [SS]

GED& 207, ECONOMIC GEOGRAPHY 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. [SS]

GED 210, INTRODUCTION TO WEATHER 5 Credits
Examines the nature of the atmosphere and provides an introduction to meteorology and the tools. Lab work required Prerequisites: MATH 095 (course no longer offered) or 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. [NS]

GED 211, INTRODUCTION TO CLIMATE AND CLIMATE CHANGE 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 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. [NS]

GEOLOGY

GEOL 101, INTRO PHYSICAL GEOLOGY 5 Credits
Study of the common rocks and minerals and the geological processes of the earth. Course includes one field trip.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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. [NS]

GEOL & 103, HISTORICAL GEOLOGY 5 Credits
Study of the geological history of the earth; evolution of the earth, oceans, mountain building processes, and life. 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. [NS]

GEOL & 110, ENVIRONMENTAL GEOLOGY 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 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. [NS]

GEOL 208, GEOLOGY OF PACIFIC NW 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. Student will chose a nearby location to examine local geology out-of-doors for the term project. 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. [NS]

GEOL 297, SPECIAL TOPICS IN GEOLOGY 1-5 Credits
Provides an avenue for students doing geology related projects outside of the normal classroom setting to get credits for their work. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 099; or permission of the Science Division Chair or designee. Recommended: Appropriate placement score or grade of C or higher in READ 088.

GEOL 298, SPECIAL TOPICS IN GEOLOGY 1-5 Credits
Provides an avenue for students doing geology related projects outside of the normal classroom setting to get credit for their work. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 099; or permission of the Science Division Chair or designee. Recommended: Appropriate placement score or grade of C or higher in READ 088.

HEALTH OCCUPATIONS

HO 027, NURSE DELEGATION 0.9 Credits
Outlines the caregiver’s educational requirements for Nurse Delegation in designated settings. Students must be a NA-C, NA-R, or be co-enrolled in the Nursing Assistant program to take this course. This course meets Washington State DSHS/ADSA requirements for training in Nurse Delegation.

HO 090, PRE-NURSING ASSISTANT 6 Credits
Provides the Fundamentals of Care Giving as a foundation for the beginner healthcare provider. Application required and is available through Allied Health department. Successful completion of the course will earn a Fundamentals of Care Giving certificate. Prerequisite: Required placement testing READ 078 or CASAS Level IV.

HO 100, NURSING ASSISTANT 7 Credits
Students who successfully complete the program will be eligible to take the State exam for Certification as a Nursing Assistant. Prerequisites: Required placement testing READ 088 or CASAS Level V, successful completion of criminal background checks and current required immunizations. Tuition plus additional lab and malpractice fee, textbook, gait belt, and blood pressure kit are required. Prerequisite: Instructor permission.

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. Prerequisite: READ 88 or CASAS Level 5. Co-requisite: Tuberculosis Screening, and Criminal History Background check, Immunization Documentation.

HO 100B, NURSING ASSISTANT 3 Credits
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. Prerequisite: HO 100A.

HO 101, SURVEY OF HEALTHCARE CAREERS 2 Credits
HO 101 Survey of Healthcare Careers 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 104, OTEP TRAINING 1 Credit
Satisfies the continuing education requirement for First Responders and EMTs to remain certified in Washington State. Student must be certified EMT-B or First Responder 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. Recommended: READ 088.
HEALTH OCCUPATIONS

HO 109, BILINGUAL SPANISH/ENGLISH WRITING  
IN THE WORKPLACE  
3 Credits  
Designed to help students attain skills for Spanish/English language writing.  
Prerequisite: Compass at or above READ 098, ENGL& 101 or WRITE 100 and Bilingual English-Spanish Proficiency Test.

HO 110, HIV/AIDS EDUCATION  
0.7 Credits  
Provides the healthcare professional with mandatory instruction involving information/knowledge associated with HIV/AIDS, hepatitis, tuberculosis, and related diseases. This class meets Washington State certification/licensing requirements for four or seven hour HIV/AIDS training for healthcare providers. Students completing this class will receive a certificate documenting the mandatory training.

HO 130, EMERGENCY MEDICAL  
TECHNICIAN-BÁSIC (EMT-B) PRG.  
10 Credits  
Instruction in delivering proper emergency care to the sick and injured in a pre-hospital setting. Upon completing this course, the student who is affiliated with an EMS agency will be eligible to take the Washington State EMT-B certification exam.  
Prerequisite: Acceptance to the EMT-B Program.

HO 132, EMERGENCY MEDICAL RESPONDER  
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.

HO 135, INTERMEDIATE LIFE SUPPORT  
9 Credits  
Current healthcare topics and continuing education are offered as it relates to the direct care provider.

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.

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. Recommended: BIOL& 251 or BIOL& 211; or previous medical experience.

HO 162, 12 LEAD ECG INTERPRETATION  
1-1 Credits  
Introduction to 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 Credits  
Seven-week Medical Spanish language course designed to enhance effective communication between patients and their healthcare providers. 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, formulations and basic mathematic calculations.

This class is open to Medical Assisting students, Nursing students, and other interested health professionals.

HO 174, TRANSCULTURAL COMPETENCY FOR  
THE HEALTH PROFESSIONAL  
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.  
Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097; or instructor permission.

HO 176, SPIRITUALITY IN HEALTHCARE  
2 Credits  
Spiritual care is within the capability and scope of responsibility of all healthcare professionals. Students will explore the importance of spirituality in providing whole person care. Classes will include didactic and experiential learning. Evaluations of students will be by student engagement with the material and weekly written reflections on class content. Students will complete the course with tools and resources for promoting spiritual well-being for their patients and themselves.

HO 180, FUNDAMENTALS OF SPANISH/ENGLISH  
MEDICAL TRANSLATION  
1 Credit  
Designed to help students attain the skills for Spanish/English language translation to be used in health care settings. Students will participate in written and oral translation methodologies. This course is both a foundation for HO 182 Fundamentals of Interpreting II and provides preparation for the Washington State Translator Certification Exam.  
Prerequisite: HO 109.

HO 181, FUNDAMENTALS OF MEDICAL  
INTERPRETATION I  
7 Credits  
Designed to help students attain the skills for Spanish/English language interpretation to be used in health care 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: OT 280.

HO 182, FUNDAMENTALS OF MEDICAL  
INTERPRETATION 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. Students will be prepared to take the Washington State Spanish Medical Interpretation Certification Exam. This course prepares students to take the Washington State Spanish Medical Interpretation Certification Exam.  
Prerequisite: HO 181.

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 189.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 199</td>
<td>SPECIAL TOPICS</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 041</td>
<td>BIOLOGY I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 042</td>
<td>BIOLOGY II</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 043</td>
<td>AMERICAN GOVERNMENT</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 044</td>
<td>COLLEGE PREP CHEMISTRY</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 045</td>
<td>UNITED STATES GEOGRAPHY</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 046</td>
<td>CONTEMPORARY WORLD PROBLEMS</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 047</td>
<td>AMERICAN GOVERNMENT I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 048</td>
<td>AMERICAN GOVERNMENT II</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 049</td>
<td>CURRENT WORLD PROBLEMS</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 050</td>
<td>GEOGRAPHY AND WORLD AFFAIRS</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 051</td>
<td>BIOLOGY I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 052</td>
<td>BIOLOGY II</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 053</td>
<td>GEOGRAPHY AND WORLD AFFAIRS</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 054</td>
<td>GEOMETRY I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 055</td>
<td>GEOMETRY II</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 056</td>
<td>GEOMETRY I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 057</td>
<td>GEOMETRY II</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 058</td>
<td>GEOMETRY I</td>
<td>1-5</td>
</tr>
<tr>
<td>HSC 059</td>
<td>GEOMETRY II</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**HIGH SCHOOL COMPLETION**

- HO 266, PHYSICAL ASSESSMENT | 1-2 Credits
  - Designed as a review for the practicing nurse or allied health professional, or as skills reinforcement to the student nurse. Practical application of clinical physical assessment skills will be the major focus of this course.

- 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.

*FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU*
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 064, FINANCIAL ALGEBRA 1A** 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.

**HSC 065, ALGEBRA THROUGH EVIDENCE** 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 066, GEOMETRY THROUGH EVIDENCE** 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 067, FINANCIAL ALGEBRA II** 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 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 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).
birth of Islam. Recommended: READ 088 or higher. Student may not earn credit for both HIST& 126 and 116. Formerly HIST 105, World History. [H][SS]

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

HIST& 128, WORLD CIVILIZATION III 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. [H] [SS]

HIST& 146, US HISTORY I 5 Credits
Significant individuals and events that have shaped the growth and development of the United States from the early Native American societies to the 1830s. Recommended: READ 088 or higher. Formerly HIST 201, American History I. [SS]

HIST& 147, US HISTORY II 5 Credits
Significant individuals and events that have shaped the growth and development of the United States from the 1830s to World War I. Recommended: READ 088 or higher. Formerly HIST 202, American History II. [SS]

HIST& 148, US HISTORY III 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. [SS]

HIST 205, AMERICAN ENVIRONMENTAL HISTORY 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. Recommended: READ 088 or higher. [SS]

HIST 211, U.S. IN WORLD AFFAIRS I 5 Credits
Examination of American involvement in international affairs from 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. [SS]

HIST 212, U.S. IN WORLD AFFAIRS II 5 Credits
Examination of American involvement in international affairs since 1898. Recommended: READ 088 or higher. Student may not earn credit for both HIST 212 and POLS 212. [SS]

HIST& 214, PACIFIC NW HISTORY 5 Credits
Survey of the growth and development of the Pacific Northwest Region from the early Native American societies to the present. Recommended: READ 088 or higher. Formerly HIST 210, Northwest History. [SS]

HIST 250, INTRODUCTION TO LATIN AMERICA ♠D 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. Recommended: READ 088 or higher. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly HIST 280. [SS][D]

HIST 255, TRADITIONAL EAST ASIAN CIVILIZATION 5 Credits
Survey of Chinese and Japanese history and culture from prehistory to present. Recommended: READ 088 or higher. [SS]

HIST 256, MODERN EAST ASIAN CIVILIZATION 5 Credits
Survey of Chinese, Japanese, Korean, and Vietnamese history and culture from 1800 to the present. Recommended: READ 088 or higher. [SS]

HIST 262, THE MODERN MIDDLE EAST 5 Credits
Introduction to the political, social, economic, and cultural patterns of development in the Middle East from 1798 to the present. Recommended: READ 088 or higher. [SS]

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.

HUM 106, FILM TECHNIQUE AND ARTISTRY 5 Credits
Studies the technical and artistic elements of several culturally diverse full length classic motion pictures. [H]

HUM 107, GENDER PERCEPTIONS IN AMERICAN FILM ♠D 5 Credits
Studies the female and male image in several genres of Hollywood movies. R rated movies are screened. [H][D]

HUM 109, WORLD ARTS AND CULTURE 5 Credits
Study of literature, poetry, visual art, film, theatre, music and history in cultures outside the United States. Recommended: ENGL 097. [H]

HUM 110, FOUR PERSPECTIVES ♠D 5 Credits
Exploration of teachings of Pythagoras, the Buddha, Jesus Christ, and Galileo. Course taken prior to fall 2010 also accepted for diversity requirement. [H][D]

HUM 112, THE CUTTING EDGE 3 Credits
Contemporary issues related to their historical, scientific, technological, and humanistic contexts. [H]

HUM 116, HUMANITIES I 5 Credits
Study of literary, artistic, and cultural achievements in the ancient world. Formerly HUM 101, Intro to Humanities I. [H]

HUM 117, HUMANITIES II 5 Credits
Study of literary, artistic, and cultural achievements in the middle ages and the renaissance. Formerly HUM 102, Intro to Humanities II. [H]
INDUSTRIAL FIRST AID

HUM& 118, HUMANITIES III 5 Credits
Study of literary, artistic, and cultural achievements in the modern world. Formerly HUM 103, Intro to Humanities III. [H],

HUM 201, LATINO ARTS AND CULTURE I 3 Credits
Examination of current-day Hispanic-Latino culture in the United States as represented in film, video, and Latino popular music. [H]

HUM 202, LATINO ARTS AND CULTURE II 3 Credits
Examination of current-day Hispanic-Latino culture in the United States as represented in art, literature, poetry, the current socio-political perspectives. [H]

HUM 299, SPECIAL TOPICS 1-5 Credits
Opportunity for students to pursue special interests and topics in the humanities.

INDUSTRIAL FIRST AID

IFA 022, MEDIC FIRST AID BASIC 0.4 Credits
A fundamental training program in emergency care that incorporates CPR and other emergency skills into a single course.

IFA 023, MEDIC FIRST AID-RECERTIFICATION 0.2 Credits
A review of basic Medical First Aid that provides the student with CPR training and other emergency skills. Students must have Medic 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, time management, engine classifications, serial numbers, and service department policies.

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. 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. Student may not earn credit for both JD 115 and JDAS 115.

JD 120, JOHN DEERE HEATING/AIR CONDITIONING 4 Credits
Theory, operation, and repair of late model John Deere air conditioning, heating, and ventilation systems are discussed.

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, JOHN DEERE ENGINE TESTING, REPAIR, 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, CO-OPT 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, CO-OPT 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, COOPERATIVE SEMINAR I 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: JD 190.

JD 193, 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: JD 191.

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.

JD 215, JOHN DEERE ELECTRONICS 5 Credits
Review of electrical fundamentals, basic electronics, and electrical diagnostics.

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.

JD 223, 20 SERIES UPDATE & ITV 1.5 Credits
Focus on customer value found in the following updates and options: 6020/7020 changes and updates; 8020/9020 changes and updates; Infinite Variable Transmission 6020/7020/7810.

JD 225, JOHN DEERE PLANTING EQUIPMENT 3 Credits
Provides proper performance of John Deere planting equipment. Student may not earn credit for both JD 225 and JDAS 225.
MATHEMATICS

JD 230, JOHN DEERE HARVESTING EQUIPMENT 4 Credits
Performance of John Deere harvesting equipment will be analyzed. 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.

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 261, ELECTRICAL/ELECTRONIC CERTIFICATION C AND CE Part 1 1.5 Credits
This two day class is intended for C & CE Service Technicians and covers basic electrical theory including: Ohm’s Law - Magnetism - Series & parallel circuits. Operation of digital multi meter is explained and experience gained on electrical/electronic circuits and components. Students become certified in electrical/electrical after taking bother Electrical/Electronic C & CE Parts I & II. It is recommended that students review the FOS Manual - Electronic and Electrical Systems prior to attending class. Prerequisite: Student should be familiar with electrical diagram symbols as shown in current technical manuals.

JD 290, CO-OP WORK EXPERIENCE III 1-16 Credits
Offers students an opportunity to receive on-the-job work experience in a John Deere Dealership. Students apply and utilize skills learned on campus. Prerequisite: JD 191. Student may not earn credit in both JD 290 and JDAS 290.

JD 292, CO-OP SEMINAR III 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: JD 290.

JD 297, SPECIAL PROJECTS 1-16 Credits
Project-oriented experiences in the area or applications not covered in the standard John Deere curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

MATH 040, NUMBER SENSE, COMPUTATION 5 Credits
Reinforcement of the student’s arithmetic background and its application to common mathematical tasks involving integers, fractions, and decimals. Introduction 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 067, INTRODUCTORY ALGEBRA 5 Credits
Operations of addition, subtraction, multiplication and division applied to real numbers. Signed numbers, inequalities, polynomials, fractions, rectangular coordinates, equations, radicals and exponents.

MATH 070A, PROPORTIONAL REASONING AND APPLICATIONS 1-5 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 1-5 Credits
Explores mathematical concepts that are foundational to success in algebra. Prerequisite: Grade of C- or higher in Math 70A, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 074C, BEGINNING ALGEBRA I-LINE 1-5 Credits
Introduction to modeling with linear equations. Prerequisite: Grade of C- or higher in Math 72B or Math 50, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 076D, BEGINNING ALGEBRA II-POL 1-5 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 or Math 65, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 078E, INTERMEDIATE ALGEBRA 1-5 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 1-5 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 5 Credits
Emphasizes mathematical reasoning, mathematical habits of thought, mathematical decision-making, mathematical communication, and the use of mathematical symbols, techniques and computations. Prerequisite: Grade of C or higher in Math 078E, grade of C- or higher in MATH 095 (no longer offered) or permission of the Mathematics Department. Formerly MATH 107, Mathematics: A Practical Experience. [NS] [Q]

MATH 115, FINITE MATHEMATICS 5 Credits
Study of mathematical systems encountered in the work of behavioral, managerial, and social science students. Prerequisite: Grade of C or higher in MATH 078E, Grade of C- or higher in MATH 095 (course no longer offered) or permission of the Mathematics Department. [NS] [Q]
MATH& 141, PRECALCULUS I 5 Credits
In-depth study of algebra to prepare students for advanced mathematics courses. Prerequisite: Grade of C or higher in MATH 80F, Grade of C- or higher in MATH 095 (course no longer offered) or permission of the Mathematics Department. Formerly MATH 109, Precalculus. [NS] [Q]

MATH& 142, PRECALCULUS II 5 Credits
Studies 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. [NS] [Q]

MATH& 148, BUSINESSCALCULUS 5 Credits
Introduction to calculus as applied to business and economics as well as the behavioral, social, and life sciences. 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. [NS] [Q]

MATH& 151, CALCULUS I 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& 141 or permission of the Mathematics Department. Formerly MATH 124, Calculus with Analytic Geometry I. [NS] [Q]

MATH& 152, CALCULUS II 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. [NS] [Q]

MATH& 153, CALCULUS III 5 Credits
Continuance of MATH& 152, topics include 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. [NS] [Q]

MATH 201, INTRODUCTION TO STATISTICS 5 Credits
Study of both descriptive and inferential statistics. Prerequisite: Grade of C or higher in MATH 078E, Grade of C- or higher in MATH 095 (course no longer offered), appropriate score on placement test, or permission of the Mathematics Department. [NS] [Q]

MATH 205, MATH FOR ELEMENTARY TEACHERS I 5 Credits
For elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics. Prerequisite: Appropriate placement score or grade of C or higher in Math 078E, C- or higher in Math 095 (course no longer offered); or permission of Mathematics Department. [NS]

MATH 206, MATH FOR ELEMENTARY TEACH II 5 Credits
Designed for elementary school teachers focusing geometry, statistics, and measurement pertaining to mathematics taught at the elementary school level. This course satisfies the quantitative skills requirement for the AA degree, provided that MATH 205 has also been completed with a grade of C- or higher. [NS] [Q]

MATH 220, LINEAR ALGEBRA 5 Credits
For students planning studies in mathematics, engineering, computer science, and physics: 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. [NS] [Q]

MATH 238, DIFFERENTIAL EQUATIONS 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. [NS] [Q]

MATH& 254, CALCULUS IV 5 Credits
Introduction to multi-variable calculus. Prerequisite: Grade of C- or higher in MATH 153 or permission of the Mathematics Department. Formerly MATH 224, Calculus & Analytical Geometry IV. [NS] [Q]

MEDA 105, HEALTH OCCUPATIONS MATHEMATICS 5 Credits
Intensive practical math designed for individuals entering the health occupations industry. Prerequisite: Appropriate placement score and instructor permission. Recommended: MATH 72B or OCSUP 106.

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: Instructor permission.

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, 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 ASSISTANTS  5 Credits
Provides a basic introduction to medical coding and billing procedures used to obtain reimbursement for medical procedures. Prerequisite: Admission to the Medical Assisting Program.

MEDA 191, MEDICAL ASSISTING INTERNSHIP  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
Companion seminar for MEDA 191. Students will discuss clinical experiences and receive input from the instructor about legal and ethical issues encountered. Students will receive guidance for both job seeking and participation in professional certification examinations. Prerequisite: Completion of first three quarters of MA program. Co-requisite: MEDA 191.

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  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. [H][D]

MUSC 106, MUSIC THEORY I  5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Formerly MUS 106. [H]

MUSC 107, MUSIC THEORY II  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 MUS 107. [H]

MUSC 108, MUSIC THEORY III  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 MUS 108. [H]

MUSC 110, HISTORY OF AMERICAN MUSIC  5 Credits
An audiovisual tour of America’s truly original music-jazz. Formerly MUS 110. [H]

MUSC 116, COLLEGE VOICE I  1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 116. [HP]

MUSC 117, COLLEGE VOICE II  1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 117. [HP]

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
MUSC 118, COLLEGE VOICE III 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 118. [HP]

MUSC 126, JAZZ COMBO I 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 MUS 126. [HP]

MUSC 127, JAZZ COMBO II 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 MUS 127. [HP]

MUSC 128, JAZZ COMBO III 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 MUS 128. [HP]

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 MUS 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 MUS 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 MUS 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 MUS 133.

MUSC 141, MUSIC THEORY I 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 106. [H]

MUSC 142, MUSIC THEORY II 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. [H]

MUSC 143, MUSIC THEORY III 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. [H]

MUSC 151, SYMPHONY/COMMUNITY BAND I 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 141.

MUSC 152, SYMPHONY/COMMUNITY BAND II 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 142.

MUSC 153, SYMPHONY/COMMUNITY BAND III 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 143.

MUSC 161, VOCAL ENSEMBLE I 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUS 161. [HP]

MUSC 162, VOCAL ENSEMBLE II 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUS 162. [HP]

MUSC 163, VOCAL ENSEMBLE III 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUS 163. [HP]

MUSC 206, MUSIC THEORY IV 5 Credits
Basic musical 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. [H]

MUSC 207, MUSIC THEORY V 5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Prerequisite: MUSC 206 or instructor permission. Formerly MUSC 207. [H]

MUSC 208, MUSIC THEORY VI 5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Prerequisite: MUSC 207 or instructor permission. Formerly MUSC 208. [H]

MUSC 216, COLLEGE VOICE IV 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 216. [HP]

MUSC 217, COLLEGE VOICE V 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 217. [HP]
MUSC 218, COLLEGE VOICE VI 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 218. [HP]

MUSC 226, JAZZ COMBO IV 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. [HP]

MUSC 227, JAZZ COMBO V 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 MUSC 227. [HP]

MUSC 228, JAZZ COMBO VI 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 MUSC 228. [HP]

MUSC 231, APPLIED MUSIC IV 1-2 Credits
Private music lessons with a college-approved instructor. Formerly MUSC 231.

MUSC 232, APPLIED MUSIC V 1-2 Credits
Private music lessons with a college-approved instructor. Formerly MUSC 232.

MUSC 233, APPLIED MUSIC VI 1-2 Credits
Private music lessons with a college-approved instructor. Formerly MUSC 233.

MUSC 241, SYMPHONY/COMMUNITY BAND IV 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 241.

MUSC 242, MUSIC THEORY IV 5 Credits
Basic musical 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. [H]

MUSC 243, MUSIC THEORY V 5 Credits
Basic musical 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 207. [H]

MUSC 244, MUSIC THEORY VI 5 Credits
Basic musical 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. [H]

MUSC 251, SYMPHONY/COMMUNITY BAND V 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 242.

MUSC 252, SYMPHONY/COMMUNITY BAND VI 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Demonstration of competency required. Formerly MUSC 243.

NURSING

NURS 100, FUNDAMENTALS OF NURSING 6 Credits
Fundamental principles underlying nursing care are presented. The focus is on providing care for middle adult and geriatric clients. Prerequisite: Admission to Nursing program. Corequisite: NURS 110 and 196.

NURS 101, BEGIN NURSING CONCEPTS I 6 Credits
Continuation of the principles of nursing care introduced in NURS 100 with the focus on providing care for clients of all ages who are experiencing normal life processes or common/chronic disease processes in selected systems Prerequisites: NURS 100 and 110. Co-requisite: NURS 111.

NURS 102, BEGINNING NURSING CONCEPTS II 6 Credits
A continuation of NURS 101. The focus is on providing care to clients of all ages experiencing normal life processes or common/chronic disease processes in selected body systems Prerequisites: NURS 101 and 111. Co-requisite: NURS 112 and 197.

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.
NUTRITION

NURS 104, LPN/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. Prerequisites: Admission to second year of Nursing program. Co-requisite: NURS 114.

NURS 110, FUNDAMENTALS PRACTICUM 4 Credits
An application of theory from NURS 100. The focus is on providing care for older adults in long-term care facilities. Prerequisite: Admission to the Nursing program. Co-requisite: NURS 100.

NURS 111, PRACTICUM I 4 Credits
An application of theory from NURS 101. The focus is on providing care for clients of all ages in acute care facilities. Prerequisite: NURS 100 and 110. Co-requisite: NURS 101.

NURS 112, PRACTICUM II 4 Credits
An application of theory from NURS 102. The focus is on providing care for clients of all ages in acute care facilities. Prerequisites: 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. 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. Prerequisite: Admission to second year of the Nursing program. Co-requisite: NURS 104.

NURS 196, PROFESSIONAL DEVELOPMENT I 1 Credit
Part one of a three-quarter course on professional development. This course is taught fall quarter to beginning nursing students and introduces the profession of nursing. Prerequisite: Admission to the Nursing program. Co-requisite: NURS 100 and 110.

NURS 197, PROFESSIONAL DEVELOPMENT II 1 Credit
Part two of a three-quarter course on professional development. This course introduces the student to the legal and ethical responsibilities of the Practical Nurse. Prerequisite: NURS 196. Co-requisite: NURS 102 and 112.

NURS 200, ADVANCED NURSING CONCEPTS I 7 Credits
A continuation of nursing principles introduced in NURS 102. The focus is on providing care to clients with complex care needs related to disturbances in mental health, disease processes in selected body systems, and managing care for groups of clients. Prerequisites: NURS 102 and 112 or transition applicant. Co-requisite: NURS 210.

NURS 201, ADVANCED NURSING CONCEPTS II 6 Credits
A continuation of the nursing principles introduced in NURS 200. The focus is on providing care to clients with complex care needs related to obstetrical conditions and disease processes in selected body systems. Prerequisites: NURS 200 and 210. Co-requisite: NURS 211 and 232.

NURS 202, ADVANCED NURSING CONCEPTS III 7 Credits
Focuses on providing care to clients with complex care needs in intensive care and emergency situations and disease processes in selected body systems. Prerequisites: NURS 201 and 211. Co-requisite: NURS 212.

NURS 210, PRACTICUM III 6 Credits
An application of theory from NURS 200. The focus is on providing care for clients in acute care, psychiatric settings and in the community. Prerequisites: NURS 102 and 112 or transition applicant. Co-requisite: NURS 200.

NURS 211, PRACTICUM IV 6 Credits
An application of theory from NURS 201. The focus is on providing care for clients in acute care, psychiatric settings and in the community. Each student completes a preceptor experience as a transition to practice as a registered nurse. Prerequisites: NURS 201 and 211. Co-requisite: NURS 202.

NURS 212, PRACTICUM V 6 Credits
An application of theory from NURS 202. The focus is on providing care for clients in acute care, psychiatric settings and in the community. Each student completes a preceptor experience as a transition to practice as a registered nurse. Prerequisites: NURS 201 and 211.

NURS 232, PROFESSIONAL DEVELOPMENT III 1 Credit
Part three of a three-part course on professional development. This course expands on the legal and ethical responsibilities in nursing and prepares the student for the responsibilities of the RN role. Prerequisite: NURS 197. Co-requisite: NURS 201 and 211.

NURS 297, SPECIAL PROJECTS 1-5 Credits
Project-oriented experiences in the area or applications not provided or covered in the standard nursing curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

NUTR& 101, NUTRITION 5 Credits
Study of food nutrients and application to normal health throughout the life cycle, including social-economic, cultural, ethnic, and psychological implications of food. This course does not include a lab. 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; CHEM& 110 or high school chemistry. Formerly NUTR 165, General Nutrition. [NS]

OCCUPATIONAL SUPPORT

OCSUP 009, CAREER DEVELOPMENT FOR LIFE TRANSITIONS 1-8 Credits
A career development and life planning course that specifically addresses the needs of displaced homemakers and those in similar circumstances with instruction in basic workplace skills, career development, budget/finance, time/stress management, and improving self-esteem. Students focus on career goals as a basis for learning effective strategies to decrease barriers to employment success and self-sufficiency. This course also provides a support group for students during a critical time of transition from the home or unemployment to the workplace. There are no class fees for eligible candidates.
OCSUP 016, FORKLIFT TRAINING
3 Credits
Students will be taught forklift truck safety techniques: the use and maintenance of electric, gasoline, and LPG forklift trucks.

OCSUP 018, INDUSTRIAL SAFETY
1 Credit
An introduction to the basics of industrial safety, emphasizing accident prevention, ergonomics and self-protection.

OCSUP 026, JOB HUNTER
1-3 Credits
Job Hunter encourages job seekers to think like employers and teaches the how to demonstrate skills and abilities in relation to business needs.

OCSUP 051, VOCATIONAL MATH
1-5 Credits
Individualized courses in basic mathematical skills pertaining to the particular vocational areas. Work includes decimals, percents, fractions, basic algebra, geometry and practical application problems for the student’s field.

OCSUP 064, JOB DYNAMICS
1-3 Credits
A curriculum to assist in developing skills in the area of learning to learn, personal management for the job, and group effectiveness.

OCSUP 088, FORKLIFT OPERATOR TRAINING
0.6 Credits
This course is designed to meet new OSHA requirements for forklift operator certification. Prerequisite: Instructors permission.

OCSUP 099, LEARNING STRATEGIES
2 Credits
A course designed for students in the OCSUP series whose placement scores indicate their ability to benefit from an individualized language skills course.

OCSUP 100, INTRODUCTION TO DICTION
3 Credits
Students learn about and practice expressing and listening skills related to basic patterns of American English.

OCSUP 101, JOB PSYCHOLOGY: WORKPLACE AND EDUCATIONAL SUCCESS SKILLS
3 Credits
Explore effective workplace relationships and understand how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction.

OCSUP 102, ORAL COMMUNICATION IN THE WORKPLACE
3 Credits
Emphasizes the development of content and relationship for effective oral communication.

OCSUP 103, JOB SEEKING SKILLS
3 Credits
Provides activities to develop each student into an effective, successful job applicant.

OCSUP 104, INTRODUCTION TO QUANTITATIVE PROBLEM SOLVING FOR THE TRADES
5 Credits
An introductory course in problem-solving for vocational and technical programs that use 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 105, QUANTITATIVE PROBLEM SOLVING FOR THE TRADES
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 106, QUANTITATIVE PROBLEM SOLVING FOR THE TRADES II
5 Credits
Integrated course of algebra, geometry and trigonometry. Focuses on the practical vocational and technical applications of understanding algebra, geometry and trigonometry. Prerequisite: Grade of C- or better in OCSUP 106, or appropriate placement score.

OCSUP 107, QUANTITATIVE PROBLEM SOLVING FOR THE TRADES III
5 Credits
A course designed for students in the OCSUP series whose placement scores indicate their ability to benefit from an individualized language skills course.

OCSUP 108, APPLIED MATHEMATICS II
5 Credits
Provides review and instruction of the basic fundamental principles of geometry and trigonometry. Prerequisite: Grade of C- or better in OCSUP 108 or appropriate placement score.

OCSUP 299, PRINCIPLES OF LEADERSHIP
1 Credit
Encourage students to develop an awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities.

OCEA& 101, INTRODUCTION TO OCEANOGRAPHY
2/LAB
5 Credits
Fundamental principles of ocean science; the geography and geology of ocean basin; chemistry of sea water; physical dynamics of currents, waves, and tides; coastal processes; and the biology of diverse ecosystems. Lab work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087 or permission of the Science Division Chair or designee. Recommended: READ 088. Formerly OCE 101, Intro to Oceanography. [NS]

OFFICE TECHNOLOGY

OT 024, KEYBOARDING
3 Credits
Introduction to the keyboard for beginning keyboard users or for students wishing to review the keyboard by touch.

OT 025, KEYBOARD SKILLBUILDING
1-5 Credits
Provides opportunity to increase keyboarding speed and accuracy. Students must be able to key by touch. Ability to key by touch required to enroll.

OT 101, OFFICE OCCUPATIONS DEVELOPMENT I
1-3 Credits
A two-fold course designed to (1) provide learning experiences which are related to and correlated with learning experiences on the job, and (2) participation in the student leadership organization, Phi Beta Lambda. Prerequisite: Instructor permission.
OT 102, OFFICE OCCUPATIONS DEVELOPMENT II 1-3 Credits
A two-fold course designed to (1) provide learning experiences which are related to and correlated with learning experiences on the job, and (2) participation in the student leadership organization, Phi Beta Lambda. Prerequisite: Instructor permission.

OT 103, OFFICE OCCUPATIONS DEVELOPMENT III 1-3 Credits
A two-fold course designed to (1) provide learning experiences which are related to and correlated with learning experiences on the job, and (2) participation in the student leadership organization, Phi Beta Lambda. Prerequisite: Instructor permission.

OT 115, MEDICAL TRANSCRIPTION I 5 Credits
Fundamental course in transcribing medical documents from sound files using word processing software and foot pedal. Prerequisite: OT 125 and OT 280.

OT 116, MEDICAL TRANSCRIPTION II 5 Credits
Advanced course in transcribing medical documents from sound files using word processing software and foot pedal. Prerequisite: OT 115. Recommended: BUS 136 and OT 125.

OT 120, DOCUMENT EDITING 5 Credits
Fundamental course in proofreading and editing skills. Recommended: BUS 136.

OT 124, OFFICE PROCEDURES 5 Credits
Course bridges the gap between the classroom and business environment with students demonstrating the ability to perform, at a professional level, the practices and procedures typical of today's office environment. Formerly OT 200 & OT 122.

OT 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.

OT 126, ADVANCED WORD PROCESSING APPLICATIONS 5 Credits
Introduces and develops advanced formatting and word processing functions for the creation of business documents. Prerequisite: OT 125.

OT 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.

OT 161, PRACTICAL ACCOUNTING 5 Credits
Studies accounting principles and applies bookkeeping procedures typical of a small office.

OT 199, SPECIAL TOPICS 1-6 Credits
Study and train to meet established local needs in the office technology industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

OT 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.

OT 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. Prerequisite: CS 110.

OT 224, ADMINISTRATIVE CAPSTONE 5 Credits
Use advanced software programs and learn to process handwritten, dictated, and stored office documents. Developing, formatting, proofreading and editing documents are also included. Formerly OT 127 & OT 117.

OT 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.

OT 229, LEGAL DOCUMENT PROCESSING 5 Credits
Covers word processing of legal document formatting including the use of legal templates to complete the production of legal documents. Provides a legal procedures background as well as use and understanding of legal terminology.

OT 231, MEDICAL OFFICE PROCEDURES III 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. Prerequisite or co-enrollment in CS 110.

OT 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. Recommended: OT 234.

OT 234, MEDICAL CODING 5 Credits
Fundamental course in assigning medical procedure (CPT) codes, 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. Prerequisite: OT 280. Recommended: READ 088 or higher.

OT 280, COMPREHENSIVE MEDICAL TERMINOLOGY I 5 Credits
Learn medical terminology for the medical field.

OT 281, MEDICAL TERMINOLOGY II 5 Credits
A continuation of Medical Terminology I (OT 280). The course will cover the additional body systems and then focuses on specialty areas of practice. Prerequisite: OT 280.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Instructor permission, based on evaluation of employer, and instructor. This formal training period is agreed upon by the student, opportunity to work in jobs directly related to the turf equipment industry. 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 191, CO-OP WORK EXPERIENCE 1-12 Credits
Opportunity to work in jobs directly related to the turf equipment industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

TST 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: TST 191.

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 TOPICS 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.

PMD 201, PARAMEDIC I 6 Credits
First course in the paramedic sequence. The focus is on the role of the paramedic, legal and ethical aspects, initial skills, and pharmacology. Prerequisite: Admission to the Paramedic Program. Co-requisite: Enrollment in PMD 201A.

PMD 201A, PARAMEDIC LAB I 2 Credits
First laboratory course in the Paramedic sequence. The focus is on the role of the paramedic, legal and ethical aspects, initial skills, and pharmacology.

PMD 202, PARAMEDIC II 6 Credits
Second course in the Paramedic sequence. The focus of the course is advanced airway management, special challenges, communication, patient assessment and physical examinations. Prerequisite: PMD 201 and PMD 201A with minimum grade of 2.0 or higher. Co-requisite: Enrollment in PMD 202A.

PMD 202A, PARAMEDIC II LAB 3 Credits
Second laboratory course in the Paramedic sequence. The focus of the course is advanced airway management, special challenges, communication, patient assessment and physical examinations. Prerequisite: PMD 201 and PMD 201A with minimum grade of 2.0 or higher. Co-requisite: Enrollment in PMD 202A.
PMD 202, PARAMEDIC III 6 Credits
Third course in the Paramedic sequence. The focus of the course is Cardiology, Neurology, Endocrinology, Allergies and Anaphylaxis.

PMD 203A, PARAMEDIC III LAB 6 Credits
Third laboratory course in the Paramedic sequence. The focus of the course is Cardiology, Neurology, Endocrinology, Allergies and Anaphylaxis. Course meets as needed for training and testing of practical skills. Students schedule and attend hospital and field internships for the purpose of completing clinical requirements and competencies. Students are required to perform clinical training and must attend all group labs. Students should plan for an average of 25 to 30 hours per week in hospital and/or field internship areas. Prerequisite: PMD 202, PMD 202A with minimum grade of 2.0 or above. Co-requisite: Enrollment in PMD 203.

PMD 204, PARAMEDIC IV 6 Credits
Fourth course in the Paramedic sequence. The focus of the course is Medical Emergencies and Trauma. Prerequisite: PMD 203, PMD203A with minimum grade of 2.0 or above. Co-requisite: Enrollment in PMD 204A.

PMD 204A, PARAMEDIC IV LAB 6 Credits
Fourth laboratory course in the Paramedic sequence. The focus of the course is Medical Emergencies and Trauma. Prerequisite: PMD 203 and PMD 203A with minimum grade of 2.0 or higher. Co-requisite: Enrollment in PMD 204.

PMD 205, PARAMEDIC V 6 Credits
Fifth course in the Paramedic sequence. The focus of the course is medical emergencies and trauma in neonatal and pediatrics. Students will focus on knowledge and skill in identifying and treating the pediatric & obstetric patients, as well as those suffering from various behavioral emergencies. Prerequisite: PMD 204, PMD 204A with minimum grade of 2.0 or above. Co-requisite: Enrollment in PMD 205A.

PMD 205A, PARAMEDIC V LAB 6 Credits
Fifth laboratory course in the Paramedic sequence. The focus of the course is medical emergencies and trauma in neonatal and pediatrics. Students will focus on knowledge and skill in identifying and treating the pediatric & obstetric patients, as well as those suffering from various behavioral emergencies.

PMD 206, PARAMEDIC VI 6 Credits
Final course in the Paramedic sequence. The focus of the course is Abdominal Trauma, Trauma Shock Management, Hematology, Infectious Disease, Environmental Emergencies, Chronic Care and ChallenGED Patient, Rescue Awareness and Operations, and Hazardous Materials Incidents.

PMD 206A, PARAMEDIC VI LAB 3 Credits
Final laboratory course in the Paramedic sequence. The focus of the course is Abdominal Trauma, Trauma Shock Management, Hematology, Infectious Disease, Environmental Emergencies, Chronic Care and ChallenGED Patient, Rescue Awareness and Operations, and Hazardous Materials Incidents. Prerequisite: PMD 205, PMD 205A with minimum grade of 2.0 or above. Co-requisite: Enrollment in PMD 206.

PMD 235, PARAMEDIC SPECIAL STUDIES 2 Credits
The focus of the course is Acute Interventions for the Chronically Ill Patient, Documentation, advanced cardiac life-support skills, and advanced trauma skills and procedures. The course follows the National Curriculum for Paramedic Training and is designed to give students the foundation to continue their training to become eligible to take the National EMT-P certification exam. Prerequisite: Successful completion of all previous PMD courses with a grade of 2.0 or better.

PHILOSOPHY

PHIL& 101, INTRO TO PHILOSOPHY 5 Credits
Study of the basic ideas in western philosophy. Recommended: READ 088 or higher and ENGL 097. Formerly PHIL 101, Intro to Philosophy I. [H]

PHIL 103, ASIAN PHILOSOPHY ^D 5 Credits
Studies the original ideas, metaphors, and images of the wisdom of Asia with an emphasis on meditation. [H][D]

PHIL 117, TRADITIONAL LOGIC 5 Credits
Introduction to systematic techniques for assessing the validity of arguments. Prerequisite: Grade C or higher in MATH 78E. [Q]or [H]

PHIL 118, EXISTENTIALISM 2 Credits
An introduction to Husserl, Sartre, de Beauvoir, Heidegger, and Camus. Readings of the philosophers’ original writings are assigned.

PHIL 120, CRITICAL THINKING 5 Credits
Study of the attitudes, skills, and theories involved with critical thinking, including formal and informal logic. [H]

PHIL 131, INTRODUCTION TO ETHICS 5 Credits
Discussion and study of the original writings of classic moral philosophers. [H]

PHIL 152, SOCIAL/POLITICAL PHILOSOPHY 5 Credits
Study elements of the social and political philosophies of several key western thinkers (Plato, Hobbes, Locke, Rousseau, Mill, Marx, Rawls, Nussbaum, Kristeva, etc). Recommended: PHIL&101, READ 088 or higher and ENGL 097. [H]

PHIL 200, HONORS SEMINAR 3 Credits
Seminar in current philosophical issues. Prerequisite: Enrolled in the Honors Program or instructor permission.

PHIL 205, PHILOSOPHY OF RELIGION 5 Credits
Examination into a variety of philosophical topics in religion such as the existence and nature of God. Recommended: READ 088 or higher and ENGL 097. [H]
### PHYSICAL EDUCATION AND RECREATION

#### HPER 101, TOBACCO AND FITNESS I 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. [PE]

#### HPER 102, TOBACCO AND FITNESS II 1 Credit
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. [PE]

#### HPER 103, CROSS TRAINING CARDIO I 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 104, JOGGING 1 Credit
Sports activity course emphasizing methods, benefits, and techniques of jogging to encourage fitness, pleasure, and safety. [PE]

#### HPER 105, KARATE 1 Credit
Sports activity course emphasizing the skills and mental discipline of karate. [PE]

#### HPER 106, TONE ZONE I 1 Credit
Provides students with an assessment of their physical fitness, and individualized exercise prescription, and an understanding of fitness and health concepts. [PE]

#### HPER 107, TONE ZONE II 1 Credit
Provides students with an assessment of their physical fitness, and individualized exercise prescription, and an understanding of fitness and health concepts. [PE]

#### HPER 108, TONE ZONE III 1 Credit
Provides students with an assessment of their physical fitness, and individualized exercise prescription, and an understanding of fitness and health concepts. [PE]

#### HPER 109, SPEED TRAINING I 1 Credit
Sports activities course emphasizing speed and agility. [PE]

#### HPER 110, CROSS TRAINING CARDIO II 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. [PE]

#### HPER 111, TONE ZONE FOR CORRECTIONS AND LAW 1 Credit
Tone Zone for Corrections & Law Enforcement (CLE) - 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 112, RECREATIONAL GAMES 1 Credit
Sports activity course emphasizing games for various age and skill groups. [PE]

#### HPER 113, BEGINNING TENNIS 1 Credit
Sports activity course emphasizing skills, rules, and strategies of tennis. [PE]

#### HPER 114, INTERMEDIATE TENNIS 1 Credit
Sports activity course emphasizing skills, rules, and strategies of competitive tennis will be covered. [PE]

#### HPER 115, SKIING/SNOWBOARDING I 1 Credit
Sports activities course at Bluewood Recreation Area, emphasizing safety, equipment, skills, and practice related to snow skiing and snowboarding. Students must attend orientation. Additional fee required. [PE]

#### HPER 116, BEGINNING VOLLEYBALL 1 Credit
Emphasizes the rules, skills, and strategies of volleyball. [PE]

#### HPER 117, INTERMEDIATE VOLLEYBALL 1 Credit
Skills, rules, and strategies of competitive volleyball will be covered. [PE]

#### HPER 118, WEIGHT TRAINING I 1 Credit
Sports activities course involving conditioning with various weight devices and involving development of personal goals and conditioning program. [PE]

#### HPER 119, WEIGHT TRAINING II 1 Credit
Sports activities course emphasizing the safety, techniques, benefits, methods, and practice of weight training. [PE]

#### HPER 120, WEIGHT TRAINING III 1 Credit
Sports activities course emphasizing the safety, techniques, benefits, methods, and practice of weight training. [PE]

#### HPER 121, INTERMEDIATE GOLF 1 Credit
Skills, rules, and strategies of competitive golf will be covered. [PE]

#### HPER 122, BEGINNING GOLF 1 Credit
Provides instruction in the basics of golf in order to develop correct technique from the first swing onward. [PE]

#### HPER 123, INTERMEDIATE GOLF 1 Credit
Provides instruction in the basics of golf in order to develop correct technique from the first swing onward. [PE]

#### HPER 124, WEIGHT TRAINING I 1 Credit
Sports activities course emphasizing the safety, techniques, benefits, methods, and practice of weight training. [PE]

#### HPER 125, WEIGHT TRAINING II 1 Credit
Sports activities course emphasizing the safety, techniques, benefits, methods, and practice of weight training. [PE]

#### HPER 126, WEIGHT TRAINING III 1 Credit
Sports activities course involving conditioning with various weight devices and involving development of personal goals and conditioning program. [PE]

#### HPER 127, BOWLING 1 Credit
Sports activities course emphasizing the safety, rules, skills, and strategies of bowling. [PE]

#### HPER 128, AQUA AEROBICS 1 Credit
A cardio workout in the pool with less impact on your joints. [PE]

#### HPER 129, BASIC SWIMMING 1 Credit
Teaches the basic swimming strokes, water safety skills and proper pre-workout stretching for all swimmers, beginning to advanced. [PE]

#### HPER 130, LIFEGUARD TRAINING 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. [PE]
PHYSICAL EDUCATION AND RECREATION

HPER 131, SKIING/SNOWBOARDING II 1 Credit
Sports activities course, skiing at Bluewood Recreation Area; students must attend orientation. Additional fee required. [PE]

HPER 132, AQUA AEROBICS II 1 Credit
A cardio workout in the pool with less impact on your joints. [PE]

HPER 133, AQUA AEROBICS III 1 Credit
A cardio workout in the pool with less impact on your joints. [PE]

HPER 134, KARATE II 1 Credit
Sports activities course emphasizing the philosophy, safety, rules, skills, techniques, and strategies of competitive karate. [PE]

HPER 136, BASKETBALL 1 Credit
Sports activities course emphasizing the safety, rules, skills, and strategies of basketball. [PE]

HPER 137, ZUMBA I 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 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 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. [PE]

HPER 140, ARCHERY II 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. [PE]

HPER 141, ALL-TERRAIN VOLLEYBALL 1 Credit
Sports activities course emphasizing the safety, rules, techniques, skills, and strategies of volleyball as played on various terrains. [PE]

HPER 144, WALKING I 1 Credit
Students to learn the proper way to walk to enhance physical fitness and to develop a lifelong skill. [PE]

HPER 145, RACQUETBALL I 1 Credit
Sports activities course emphasizing racquetball fundamentals, strategies, and appropriate conditioning. [PE]

HPER 146, RACQUETBALL II 1 Credit
Sports activity course emphasizing the safety, rules, skills, strategies, and techniques of playing racquetball competitively. [PE]

HPER 147, WALKING II 1 Credit
Learn the proper way to walk, enhancing and evaluating their own fitness level while developing a lifetime activity.

HPER 148, WALKING III 1 Credit
Learn the proper way to walk, enhancing and evaluating their own fitness level while developing a lifetime activity.

HPER 154, SPEED TRAINING II 1 Credit
Sports activities course emphasizing speed and agility. [PE]

HPER 155, SPEED TRAINING III 1 Credit
Sports activities course emphasizing speed and agility. [PE]

HPER 156, YOGA I 1 Credit
Through this on campus course, techniques and tools of yoga will be taught and learned. Yogic poses and stress management methods will be obtained through the introduction to relaxation exercises of breath work. Understanding the anatomy of the body through the yoga pose will be experienced.

HPER 157, YOGA II 1 Credit
Through this on campus course, techniques and tools of yoga will be taught and learned. Yogic poses and stress management methods will be obtained through the introduction to relaxation exercises of breath work. Understanding the anatomy of the body through the yoga pose will be experienced.

HPER 160, BASIC RODEO SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of college rodeo. [PE]

HPER 161, INTERMEDIATE RODEO SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of college rodeo. [PE]

HPER 162, ADVANCED RODEO SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of college rodeo. [PE]

HPER 166, BEGINNING YOGA I 1 Credit
Introduction to the philosophy and practice of the ancient art of Yoga. Co-requisite: HPER 167. [PE]

HPER 167, BEGINNING YOGA II 1 Credit
Continues the exploration of the philosophy and practice of Yoga. Co-requisite: HPER 166. [PE]

HPER 171, BASKETBALL SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of basketball. [PE]

HPER 172, BASEBALL/SOFTBALL SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of baseball. [PE]

HPER 174, VOLLEYBALL SKILLS AND RULES 2 Credits
Sports activity course emphasizing skills, rules and strategies of volleyball. [PE]
### PHYSICS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPER 176</td>
<td>GOLF SKILLS AND RULES</td>
<td>2</td>
</tr>
<tr>
<td>HPER 177</td>
<td>SOCCER SKILLS AND RULES</td>
<td>2</td>
</tr>
<tr>
<td>HPER 181</td>
<td>BASKETBALL METHODS AND MATERIALS</td>
<td>2</td>
</tr>
<tr>
<td>HPER 182</td>
<td>BASEBALL AND SOFTBALL METHODS AND MATERIALS</td>
<td>2</td>
</tr>
<tr>
<td>HPER 184</td>
<td>VOLLEYBALL METHODS AND MATERIALS</td>
<td>2</td>
</tr>
<tr>
<td>HPER 186</td>
<td>GOLF METHODS AND MATERIALS</td>
<td>2</td>
</tr>
<tr>
<td>HPER 187</td>
<td>SOCCER METHODS AND MATERIALS</td>
<td>2</td>
</tr>
<tr>
<td>HPER 188</td>
<td>BASIC FITNESS I</td>
<td>1</td>
</tr>
<tr>
<td>HPER 189</td>
<td>BASIC FITNESS II</td>
<td>1</td>
</tr>
<tr>
<td>HPER 190</td>
<td>BASIC FITNESS III</td>
<td>1-2</td>
</tr>
<tr>
<td>HPER 191</td>
<td>CORE WORKOUT</td>
<td>1</td>
</tr>
<tr>
<td>HPER 264</td>
<td>STRESS MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>HPER 267</td>
<td>OUTDOOR RECREATION</td>
<td>5</td>
</tr>
<tr>
<td>HPER 268</td>
<td>DIVERSITY IN SPORTS AD</td>
<td>5</td>
</tr>
<tr>
<td>HPER 273</td>
<td>FITNESS FOR LIFE</td>
<td>3</td>
</tr>
<tr>
<td>HPER 274</td>
<td>PERSONAL AND COMMUNITY HEALTH AND HYGIENE</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>PHYS NON-SCI MAJRS W/LAB</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 114</td>
<td>GENERAL PHYSICS I W/LAB</td>
<td>5</td>
</tr>
</tbody>
</table>

### FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
PHYS& 115, GENERAL PHYSICS II W/LAB 5 Credits
Mechanical properties of matter, behavior of fluids, harmonic motion and waves, basic thermodynamics, and an introduction to electricity. Prerequisite: PHYS& 114. Formerly PHYS 122, College Physics II. [NS]

PHYS& 116, GENERAL PHYS III W/LAB 5 Credits
Electricity and magnetism, optics, and selected topics in modern physics (relativity, structure of the atom, quantum theory, etc.). Prerequisite: PHYS& 115. Formerly PHYS 123, College Physics III. [NS]

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, ENGINEERING PHYS I W/LAB 5 Credits
Linear and rotational motion, forces, kinetic and potential energy, momentum, and translational and rotational equilibrium. 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. Co-requisite: MATH& 151. Formerly PHYS 201, Physics for Science and Engineering I. [NS]

PHYS& 222, ENGR PHYSICS II W/LAB 5 Credits
Mechanical properties of matter, behavior of fluids, harmonic motion and waves, basic thermodynamics, and an introduction to electricity. Prerequisite: PHYS& 221. Co-requisite: MATH& 152. Formally PHYS 202, Physics for Science and Engineering II. [NS]

PHYS& 223, ENGR PHYSICS III W/LAB 5 Credits
Electricity and magnetism, with selected topics from optics and modern physics. Prerequisite: PHYS& 222. Co-requisite: MATH& 153. Formerly PHYS 203, Physics for Science and Engineering III. [NS]

POLITICAL SCIENCE

POLS 120, THE AMERICAN PRESIDENCY 5 Credits
A historical and analytical examination of the Executive Branch of the United States government. Recommended: READ 088 or higher. Student may not earn credit for both POLS 120 and HIST 120. Formerly PSCI 120. [SS]

POLS& 202, AMERICAN GOVERNMENT 5 Credits
Study of the processes and institutions of national politics in America. Recommended: READ 088 or higher. Formerly PSCI 101, American National Government. [SS]

POLS 204, CONSTITUTIONAL LAW 5 Credits
Examination of the United States Constitution and amendments. Recommended: READ 088 or higher. Formerly PSCI 204.

POLS 211, U.S. IN WORLD AFFAIRS I 5 Credits
Examination of American involvement in international affairs from 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. [SS]

POLS 212, U.S. IN WORLD AFFAIRS II 5 Credits
Examination of American involvement in international affairs since 1898. Recommended: READ 088 or higher. Student may not earn credit for both POLS 212 and HIST 212. Formerly PSCI 212. [SS]

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/WATER POLICY 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. [SS]

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.

PGM 102, GOLF MANAGEMENT II 5 Credits
Intermediate golf shop operations and tournament administration will be discussed.

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.

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.

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.

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.

PGM 191, CO-OP WORK EXPERIENCE 1-18 Credits
Opportunity to work at golf facilities while concurrently enrolled in related golf management courses. Prerequisite: Instructor permission. Co-requisite: PGM 192.

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

225
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.

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.

PGM 211, CORRECTIVE GOLF LESSONS 3 Credits
Intermediate golfers with swing habits that are counterproductive to effective ball striking are covered.

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.

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.

PGM 291, CO-OP WORK EXPERIENCE II 1-18 Credits
Opportunity to work at golf facilities while concurrently enrolled in related golf management courses. 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. Prerequisite: Instructor permission.

PSY 100, GENERAL PSYCHOLOGY 5 Credits
Introduction to the factors which influence behavior and mental processes, as well as the relationship of mind and body. Recommended: READ 088 or higher. Formerly PSY 101, Introduction to Psychology. [SS]

PSY 111, PSYCHOLOGY OF RELATIONSHIPS 3 Credits
Personal discovery of the factors that influence interactions including friendships, romantic relationships, work interactions, and family interactions. Formerly PSY 111. [SS]

PSY 113, HUMAN SEXUALITY ^D 5 Credits
Study of sexual facts, attitudes, morals, and behavior. COURSE FOR ADULTS—lectures and films may contain explicit language, scenes, nudity, and other material. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Recommended: READ 088 or higher. Student may not earn credit for both PSYC 113 and WST 113. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly PSY 113. [SS][D]

PSY 139, PSYCHOLOGY OF WOMEN 5 Credits
Explore the historical, cultural, and biological development of growing up female. Student may not earn credit for both PSYC 139 and WST 139. Recommended: READ 088 or higher. Formerly PSY 139. [SS]

PSY 140, CAREER AND LIFE PLANNING 3 Credits
A systematic approach to planning students’ individual career paths. Students learn to recognize their skills, interests, and values related to work and education. Career fields and occupations are identified that relate appropriately to those personal characteristics and students learn to research the demands, rewards and employment practices unique to each. Resumes and portfolios are produced as part of preparing to conduct an effective job search. Recommended: ENGL 077. Formerly PSY 140.

PSY 160, PSYCHOLOGY OF CRIMINAL BEHAVIOR 5 Credits
Study of maladaptive behavior as formally recognized by the American Psychiatric Association and classified in the Diagnostic Statistical Manual. Recommended: READ 088 or higher. Formerly PSY 160. [SS]

PSY 196, PSYCHOLOGY OF HUMAN PERFORMANCE 3 Credits
In-depth study of the relationship between the mind and body in performance situations. Recommended: READ 088 or higher. Formerly PSY 196.

PSYC 200, LIFESPAN PSYCHOLOGY 5 Credits
In-depth study of human development focusing on the biological, cognitive, and psychosocial domains of each of the stages of the life span from birth to death. Recommended: READ 088 or higher. Formerly PSY 103, Developmental Psychology. [SS]

PSYC 205, SOCIAL PSYCHOLOGY ^D 5 Credits
Study of the influence of the behavior of others on 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. [SS][\^D]

**PSYC 207, PSYCHOLOGY OF PERSONALITY** 5 Credits
Introduction to the study of personality, including an overview
of the major theories, research strategies for measuring aspects
of personality, and practical applications to psychological
adjustment in daily life. **Prerequisite:** PSYC& 100, General
Psychology. Recommended: READ 088 or higher.

**PSYC 219, HEALTH PSYCHOLOGY** 5 Credits
An examination of the psychological factors affecting wellness,
including emotional, cognitive, social and behavioral aspects.
Biopsychological mechanisms underlying illness and methods
for improving health are included. **Prerequisite:** PSYC& 100, General
Psychology. Recommended: READ 088 or higher. Formerly PSY
219. [SS]

**PSYC& 220, ABNORMAL PSYCHOLOGY** 5 Credits
Study of origins and characteristics of maladaptive behavior with
emphasis on scientific research on the causes and treatment
approaches to changing abnormal behavior. **Prerequisite:**
PSYC& 100. Recommended: READ 088 or higher. Formerly PSY
250, Abnormal Psychology. [SS]

**PSYC 224, ENVIRONMENTAL PSYCHOLOGY** 5 Credits
Study of interrelationships between people and the environment.
The 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. [SS]

**PSYC 225, PSYCHOLOGY OF ENVIRONMENTAL PROBLEMS** 2 Credits
Provides opportunity to apply psychological theory and research to
environmental problems. Course will focus on how psychological
principles may contribute to building a sustainable culture with an
applied component in which the student will explore interventions
to promote an awareness of current environmental difficulties.
Recommended: READ 088 or higher. Formerly PSY 225.

**PSYC 240, HONORS SEMINAR: EXPLORATIONS IN PSYCHOLOGY** 2 Credits
Provide students with a chance to examine a specific area of
Psychology in depth. The basic concepts of the particular area
of study will be covered, in addition to discussion of related
current events and specific issues of local, national or global
interest. **Prerequisite:** Students must be enrolled in WWCC
Honors Program, or instructor permission.

**PSYC 297, SPECIAL PROBLEMS** 1-5 Credits
Provides an opportunity to design and implement a research
project of interest in psychology under the supervision of an
instructor. **Prerequisite:** Instructor permission. Formerly PSY 297.
SOC 109, HUMAN SERVICES FIELD EXPERIENCE III 1-3 Credits
Provides a supervised experience in a social agency, school, health care facility, youth group, etc. in the local community. **Prerequisite:** Instructor permission.

SOC 110, HUMAN SERVICES FIELD EXPERIENCE IV 1-3 Credits
Provides a supervised experience in a social agency, school, health care facility, youth group, etc. in the local community. **Prerequisite:** Instructor permission.

SOC 150, INTRODUCTION TO SOCIAL WORK 5 Credits
Examination of the field of social work and practice settings.

SOC 160, INTRODUCTION TO HUMAN GEOGRAPHY 5 Credits
Analyzes human populations, cultures, activities, and connections within the physical landscapes. Student may not earn credit for both SOC 160 and GEOG 160. [SS]

SOC 164, INVESTIGATING THE DYNAMICS OF SOCIOECONOMIC CLASSES 2 Credits
Learn differences related to socio-economic class such as values, priorities, language and decision making processes. Recommended: READ 088

SOC& 201, SOCIAL PROBLEMS 5 Credits
Examines a variety of global social problems-conditions or phenomena that adversely affect significant segments of the population. Formerly SOC 201, Intro to Social Problems. [SS]

SOC 204, DRUGS AND SOCIETY 5 Credits
Study of drugs and the related socio-cultural history of use and abuse. Recommended: READ 088 or higher. [SS]

SOC 205, RACIAL/ETHNIC RELATIONS 5 Credits
Focuses on intergroup race and ethnic relations with a social-historical emphasis. Course taken prior to fall 2010 also accepted for diversity requirement. [SS] [D]

SOC 206, SOCIAL GERONTOLOGY AND THE AGING REVOLUTION 5 Credits
Analysis on the physical, mental and social changes in people as they age, with an emphasis on the aging process itself and effects of our aging population on society. Course taken prior to fall 2010 also accepted for diversity requirement. [SS] [D]

SOC 208, SOCIOLOGY OF INTIMATE AND FAMILY RELATIONS 5 Credits
Examines the processes involved in family relationships, household life and structures, and family problems. Course taken prior to fall 2010 also accepted for diversity requirement. [SS][D]

SOC 210, CONTEMPORARY SOCIAL ISSUES 5 Credits
Course for curious students who like to delve deeply into hot-topic current social issues. The quarterly theme is determined in advance based on the results of recent student polling. See catalog for full description. [SS]

SOC 220, GENDER AND SOCIETY 5 Credits
Explores the pervasiveness and complexities of a sex and gender “system,” predominately focusing on our own society. 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. [SS] [D]

SOC 226, COMMUNITY LEADERSHIP 6 Credits
Designed for participants in the Sherwood Trust Community Leadership Program. It is comprised of a 60-hour curriculum and requires a commitment to participate for one weekend each month between February and June. This course is available to current participants in the Sherwood Trust Community Leadership Program. **Prerequisite:** Instructor permission required.

SOC 227, COMMUNITY LEADERSHIP SERVICE PROJECT 1 Credit
Designed for participants in the Sherwood Trust Community Leadership Program. This course is sequel to SOC 226 reflects the participation in a minimum of 30 hours of a selected community service project.

SOC 230, MEDICAL SOCIOLOGY 5 Credits
Analysis of the medical health care system and the social consequences current health policy has on our health and illness today. An emphasis will be placed on the biological, societal and methodological view of our health and health care system. Recommended: READ 088 or higher. [SS]

SOC 250, ZEN SOCIOLOGY 2 Credits
This honors seminar explores Zen Sociology through assigned “experiments in personal freedom and everyday life.” **Prerequisite:** Member of Honors program or instructor permission.

SPAN& 121, SPANISH I 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. [H]

SPAN& 122, SPANISH II 5 Credits
Introductory course for students wishing to learn Spanish as a second language. Provides a foundation for practical interpersonal communications. Topics include pronunciation, basic grammar, reading, writing, and an introduction to Hispanic culture. **Prerequisite:** SPAN& 121 or instructor permission. Formerly SPAN 102, Spanish II. [H]

SPAN& 123, SPANISH III 5 Credits
Introductory course for students wishing to learn Spanish as a second language. Provides a foundation for practical interpersonal communications. Topics include pronunciation, basic grammar, reading, writing, and an introduction to Hispanic culture. **Prerequisite:** SPAN& 122 or instructor permission. Formerly SPAN 103, Spanish III. [H]

SPAN& 221, SPANISH IV 5 Credits
Intermediate course provides practice in speaking, listening, reading, and writing. Students study grammar, vocabulary, and the use of idiomatic expressions. **Prerequisite:** SPAN& 123 or instructor permission. Formerly SPAN 201, Spanish IV. [H]
TURF MANAGEMENT

SPAN& 222, SPANISH V 5 Credits
Intermediate course provides practice in speaking, listening, reading, and writing. Students study grammar, vocabulary, and the use of idiomatic expressions. Prerequisite: SPAN& 221 or instructor permission. Formerly SPAN 202, Spanish V. [H]

SPAN& 223, SPANISH VI 5 Credits
Intermediate course provides practice in speaking, listening, reading, and writing. Students study grammar, vocabulary, and the use of idiomatic expressions. Prerequisite: SPAN& 222 or instructor permission. Formerly SPAN 203, Spanish VI. [H]

TURF MANAGEMENT

TURF 101, TURF EQUIPMENT OPERATIONS I 3 Credits
The use, operation, and maintenance of turf equipment, including mower units, top dressers, soil aerators, trimmers, and miscellaneous turf equipment are covered.

TURF 122, TURF MAINTENANCE PRACTICES 3 Credits
Introduction to the methods used in maintenance of sports fields, parks, school grounds, and golf courses.

TURF 191, CO-OP WORK EXPERIENCE 1-25 Credits
Opportunity to work in jobs directly related to the turf management industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

TURF 192, COOPERATIVE SEMINAR 2 Credits
Students 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: TURF 191.

TURF 199, SPECIAL TOPICS 1-10 Credits
Study and train to meet established local needs in the turf management industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

TURF 201, TURFGRASS CULTURAL PRACTICES 6 Credits
Introduction to turf grass cultural practices.

TURF 211, TURF MANAGEMENT 5 Credits
Focuses on the fundamentals of turf management, operation, and performance in areas of budgeting, supervision, and communication skills.

TURF 215, TURF DISEASES AND INSECTS 3 Credits
Introduction to identification, study of life cycles, and control of insects and diseases common to turf.

TURF 221, LANDSCAPE MAINTENANCE 3 Credits
Maintenance and construction of landscapes that include turf, flowers, shrubs, trees, fencing, and hard surfaces.

TURF 231, PESTICIDE LICENSING 3 Credits
Preparation for the State of Washington pesticide licensing exam.

TURF 251, TURF MANAGEMENT FOR INSTRUCTORS 3 Credits
Designed to train educators in teaching turf management to high school students.

TURF 252, TURF EQUIPMENT MAINTENANCE AND REPAIR 3 Credits
Gas and diesel engines, electrical, power trains, and hydraulics to perform simple tune-up and repairs will be covered.

TURF 281, TURF MANAGEMENT TECH PREP II 2 Credits
In-service training to high school turf management teachers. Fundamentals of turf equipment operation, careers in turf management, and turf physiology will be discussed.

TURF 291, CO-OP WORK EXPERIENCE II 1-25 Credits
Opportunity to work in jobs directly related to the turf management industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

TURF 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: TURF 291.

TURF 297, SPECIAL PROJECTS 1-18 Credits
Project-oriented experiences in the area or applications not covered in the standard turf management curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

TURF 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.

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 110A, TURF IRRIGATION SYSTEM COMPONENTS 3 Credits
A study of the components which are used in a lawn and turf irrigation system. This short course will focus on all the equipment needed to complete an installation of a lawn and landscape irrigation system, including drip components and xeriscaping. Calculating precipitation rates will be included in this course. Pipe selection due to friction loss will be introduced.
WTM 110B, SITE AND SYSTEMS ANALYSIS 3 Credits
Analyzes site conditions and how those conditions are considered in the design phase of a lawn and turf irrigation system. Considerations such as soil, water, crop relationships, elevation, friction loss and pipe sizing will be covered. Simple irrigation system layouts will be constructed and site analysis will be performed on those layouts. Formerly WMGT 110B.

WTM 110C, DESIGN AND INSTALLATION 3 Credits
Includes a lawn and turf irrigation design of an actual site. All aspects of the design will be included, such as piping, valving, head layout and controller and wire location. Also included will be creating a material list and pricing strategies. Installation methods will be studied and analyzed. Formerly WMGT 110C.

WTM 112, IRRIGATION PRINCIPLES 1-5 Credits
Overview of the elements of irrigation and its industry. Formerly WMGT 112.

WTM 112A, IRRIGATION SYSTEM COMPONENTS 1 Credit
An overview of pressurized irrigation systems and their components. Examples of their applications in the field. Formerly WMGT 112A.

WTM 112B, PERFORMANCE AND INSTALLATION 1 Credit
Analysis of irrigation system water application. Measurement of system efficiencies. Installation and maintenance of components. Formerly WGMT 112 B.

WTM 112C, HYDRAULICS AND SOIL 1 Credit
Introduction of pump and piping systems. Basic water hydraulics related to irrigation systems. Analysis of plant-water-soil relationships. Formerly WMGT 112C.

WTM 112D, PLANT WATER USE 1 Credit
Evaluation of how plants use water and how to provide for their needs through irrigation. Formerly WGMT 112D

WTM 112E, SPECIAL IRRIGATION APPLICATIONS 1 Credit
Environmental uses of irrigation. Economic considerations in choosing and installing a system. Energy demands and alternatives to operate a system. Formerly WMGT 112E.

WTM 135, CULTURES OF WATER 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. 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 141, CENTER PIVOT TROUBLESHOOTING 5 Credits
Train individuals to troubleshoot Center Pivot irrigation system problems. Troubleshooting will include mechanical, electrical, and hydraulic systems. Formerly WGMT 141.

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. Recommend: WTM 139, WTM 239, and/or BIOL 130. Formerly NR 190.

WTM 191, CO-OP 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 WMGT 191.

WTM 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: WTM 191. Formerly WMGT 192.

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 WMGT 199.

WTM 200, FIELD BOTANY 5 Credits
Focus on the plant identification and restoration process. This information will be used in watershed assessment and restoration activities. Laboratory and field work provide opportunities to use dichotomous keys and learn the local flora. Students will be required to create a journal that depicts the distribution, identification, life history, and cultural significance of plants in eastern Washington/Oregon to be used as a resource for watershed restoration. Formerly NR 200.

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. Formerly WMGT 220. **Prerequisite:** WTM 112 or instructor permission.

WTM 221, PUMP APPLICATIONS 3 Credits
Pump types and characteristic of different classes of pumps. Pump types will include positive and non-positive displacement pumps, with the focus of the course on non-positive styles of pumps. Piston, gear, and diaphragm positive displacement pump will be studied. Non-positive styles will include centrifugal classes, including end suction centrifugal, submersible, turbine and jet pumps. The selection and application of pumps will be analyzed. Installation practices will also be studied with a special emphasis on suction side design criteria for end suction centrifugal pump applications. **Prerequisite:** WTM 112 or instructor permission. Formerly WGMT 221.

WTM 225, TURF IRRIGATION CONTROLS 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 225A, HYDRAULICS AND BASIC DESIGN 2 Credits
Development and analysis of total hydraulic, electrical, and mechanical irrigation designs of agriculture and turf systems. Formerly WMGT 225A.

WTM 225B, IRRIGATION DESIGNS 2 Credits
Development and analysis of total hydraulic, electrical, and mechanical irrigation designs of agriculture and turf systems. Formerly WMGT 225B.

WTM 225C, SPECIALIZED DESIGN 2 Credits
Development and analysis of total hydraulic, electrical, and mechanical irrigation designs of agriculture and turf systems. Formerly WMGT 225C.

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 IRRIGATION SYSTEMS 3 Credits
This course builds upon the previously-learned irrigation principles and electrical controls and then applies those concepts into a 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 291, CO-OP WORK EXPERIENCE II 1-25 Credits
Offers students an opportunity to work in jobs directly related to the water management industry. This formal training period is agreed upon by the student, employer, and instructor. **Prerequisite:** Instructor permission. Formerly WMGT 291.

WTM 292, COOPERATIVE SEMINAR II 1-2 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.

WTM 297, SPECIAL PROJECTS 1-18 Credits
Project-oriented experiences in the area or applications not covered in the standard water management curriculum. **Prerequisite:** Instructor permission, based on evaluation of student’s education and work experience. Formerly WMGT 297.

WTM 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. Formerly WMGT 299.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 110</td>
<td>ART WELDING</td>
<td>1-4</td>
<td>Provides the necessary skills in welding processing and applications for hobby or personal projects.</td>
</tr>
<tr>
<td>WELD 141</td>
<td>WELDING BASICS</td>
<td>4</td>
<td>Opportunity to select customized welding process instruction for application training, industry practices, hobby uses, or skill development to meet employer/employment requirements.</td>
</tr>
<tr>
<td>WELD 145</td>
<td>BASIC WELDING I</td>
<td>1-7</td>
<td>Introduction to welding, cutting, and grinding procedures used for general welding applications.</td>
</tr>
<tr>
<td>WELD 146</td>
<td>BASIC WELDING II</td>
<td>1-7</td>
<td>Provides the experienced welder additional training on student selected welding processes. <strong>Prerequisite:</strong> WELD 145.</td>
</tr>
<tr>
<td>WELD 147</td>
<td>BASIC WELDING III</td>
<td>1-7</td>
<td>Provides the experienced welder additional training on student selected welding processes. <strong>Prerequisite:</strong> WELD 146.</td>
</tr>
<tr>
<td>WELD 151</td>
<td>SHIELD METAL ARC WELDING I</td>
<td>1-17</td>
<td>Entry-level student training in safe practices of fuel gas cutting/welding and shielded metal arc welding. <strong>Prerequisite:</strong> Instructor permission.</td>
</tr>
<tr>
<td>WELD 152</td>
<td>SHIELD METAL ARC WELDING II</td>
<td>1-17</td>
<td>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. <strong>Prerequisite:</strong> WELD 151 and instructor permission.</td>
</tr>
<tr>
<td>WELD 153</td>
<td>SHIELD METAL ARC WELDING III</td>
<td>1-17</td>
<td>Additional experience and training in safe SMAW welding procedures and the opportunity to complete AWS/WABO certification tests. <strong>Prerequisite:</strong> WELD 152 and instructor permission.</td>
</tr>
<tr>
<td>WELD 191</td>
<td>CO-OP WORK EXPERIENCE</td>
<td>1-15</td>
<td>Opportunity to work in jobs directly related to the welding industry. This formal training period is agreed upon by the student, employer, and instructor. <strong>Prerequisite:</strong> Instructor permission.</td>
</tr>
<tr>
<td>WELD 192</td>
<td>COOPERATIVE SEMINAR</td>
<td>5</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. <strong>Co-requisite:</strong> WELD 191.</td>
</tr>
<tr>
<td>WELD 196</td>
<td>WELDING SKILL DEVELOP I</td>
<td>1-17</td>
<td>Provides variable lab times and credits to meet individual requirements. <strong>Prerequisite:</strong> Instructor permission.</td>
</tr>
<tr>
<td>WELD 199</td>
<td>SPECIAL TOPICS</td>
<td>1-10</td>
<td>Study and train to meet established local needs in the welding industry, supplemental to courses currently offered.</td>
</tr>
</tbody>
</table>

**Prerequisite:** Instructor permission.
## Women's Studies

**WST 113, Human Sexuality**  
5 Credits  
Study of sexual facts, attitudes, morals, and behavior. COURSE FOR ADULTS--lectures and films may contain explicit language, scenes, nudity, and other material. **Prerequisite:** Appropriate placement score or grade of C or higher in ENGL 097. Recommended: READ 088 or higher. Student may not earn credit for both WST 113 and PSYC 113. Course taken prior to fall 2010 also accepted for diversity requirement. [SS] [D]

**WST 124, Women Artists in History**  
5 Credits  
Focuses on the unique artistic contributions of women artists through history from the middle ages to present. Includes emphasis in issues of social justice, cultural expectations and institutional obstacles. Student may not earn credit for both WST 124 and ART 124. Recommended: READ 088 or higher. [H] [D]

**WST 139, Psychology of Women**  
5 Credits  
Explore the historical, cultural, and biological development of growing up female. Student may not earn credit for both WST 139 and PSYC 139. Recommended: READ 088 or higher. Formerly PSY 139. [SS]

**WST 200, Introduction to Women's Studies**  
5 Credits  
Analysis of the construction and enforcement of gender differences and inequalities, studied from a multidisciplinary and multicultural perspective. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher. [SS] [D]

**WST 215, Women in U.S. History**  
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. 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. [SS][D]

**WST 220, Gender and Society**  
5 Credits  
Explores the pervasiveness and complexities of a sex and gender “system,” predominately focusing on our own society. 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. [SS][D]

**WST 251, Voices of Women in Literature**  
5 Credits  
Survey of selected women writers across time and cultures. 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. [H] [D]

## Writing

**WRITE 100, Writing in the Workplace**  
3 Credits  
Provides writing skills useful in the career market. Assignments include writing professional e-mails, memos, letters, and business reports. Students will acquire basic computer skills, and will learn to proofread and edit their own documents. **Prerequisite:** Appropriate placement score, grade of C or higher in ENGL 077, or instructor permission. Recommend: OT 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.
Faculty, Staff and Administrators
Adams, Jeffrey
Instructor, Spanish
B.A., Eastern Oregon University; M.A., University of Washington

Adams, Michael
Instructor, Auto Repair Technology
A.A.A.S., Wyoming Technical Institute

Adamski, Kathleen
Dean, Health Science Education
B.S.N., Western Washington University; M.N., University of Washington

Anderson, Brad
Information Technology Specialist 2, Technology Services
A.A.S., Walla Walla Community College

Anderson, Brenda
Instructor, Nursing
A.D.N., Walla Walla Community College; B.S.N., M.S.N., University of Phoenix

Anderson, James
Manager, Campus Food and Catering

Anderson, Michael
Maintenance Mechanic 2, Facility Services

Anderson, Scott
Media Technician Sr., Media, Marketing & Graphics

Andrews, Linda
Instructor, English/Speech
B.A., Michigan State University; East Lansing; M.F.A., University of Washington

Angell, Alecia
Manager, Bookstore
B.S., Oregon State University

Angus, Claudia
Coordinator, Disability Support Services
B.A., Washington State University; M.S.W., Walla Walla College; Ph.D., Washington State University

Anhorn, Gerald
Dean of Ag Science, Energy, and Water Management
A.A.A.S., Walla Walla Community College; B.S., M.S., Washington State University

Arlington, Jeffrey
Instructor, Basic Skills - Coyote Ridge Corrections Center
B.A., Eastern Washington University

Aschenbrenner, Sarah
Secretary Senior, Workforce Education

Ault, Tim
Instructor, Refrigeration and Air Conditioning - Coyote Ridge Corrections Center

Ayres, Michael
Instructor, Nursing - Clarkston Campus
M.S.N./ED, University of Phoenix

Bailey, David
Instructor, Diesel Equipment Mechanics

Barila, Theresa
Coordinator, Community Network
B.S., American University; M.S., University of Maryland

Barnett, Jonathan
Program Assistant, Office of Admissions & Records
A.A., Walla Walla Community College; B.A., Washington State University; M.S., Full Sail University

Barton, Robert
Athletics Fundraiser/Intramurals Coordinator/Head Rodeo Coach, Athletics
A.A., Walla Walla Community College

Bayne, Douglas
Director, Resource Development
B.S., United States Naval Academy

Becker, Robert
Instructor, Nursing
A.D.N., Walla Walla Community College; B.S.N., University of the State of New York; M.N., University of Washington

Bellmore, Gail
Human Resource Consultant Assistant 2, Human Resources

Benefiel, Gary
Instructor/Advisor, Alternative Education Program
B.A., M.A., Washington State University

Bennett, Carol
Coordinator, Student Services - Clarkston Campus
B.S., M.S., University of Idaho

Berg, Adam
Advisor/Retention Specialist, Career and Employment Services Center
A.A., Columbia Basin College; B.A., Eastern Washington University; M.A., Gonzaga University

Bernal, Roxanne
Office Assistant 3, Corrections Education - Coyote Ridge Corrections Center
A.S., Charter College

Bertran-Alvarado, Fernando
Custodian 4, Facility Services
Carpentry Certificate, Walla Walla Community College

Binney, Suky
I-BEST Transitions Specialist, Transitional Studies

Bloom, Cheryl
Program Assistant, Office of Admissions & Records

Boatman, Jacqueline
Fiscal Technician 3, Business Services

Boone, Gary
Procurement and Supply Specialist 2, Purchasing Department
A.A., Walla Walla Community College; B.A., Eastern Washington University

Boone, John
Instructor, Information Technology Certificate Program - Washington State Penitentiary
B.A., Whitman College

Bowen, Samantha
Director, Early Childhood Education

Bower, James
Instructor, Humanities - Clarkston Campus
B.A., California State University, Fullerton; M.A., Emmanuel School of Religion; M.Ed., East Tennessee State University

Boyd, Paul
Instructor, Transitional Studies - Clarkston Campus
B.S., M.Ed., University of Idaho

Boyd, Rebekah J
Program Manager, Early Childhood Education
B.A., Concordia University

Boyington, Julianne
Secretary Senior, Title 3 Grant
A.A.S., Bellevue Community College

Bradford, Gerald
Corrections Education Navigator, Corrections Education - Seattle
B.A., University of Washington

Bradshaw, James
Director, Energy Systems Program

Brickey, Lee
Instructor, Auto Body Repair Technology - Washington State Penitentiary
A.A.S., Columbia Basin College; B.A., Central Washington University

Bross, Genevieve
Instructor, Nursing - Clarkston Campus
M.S.N., Gonzaga University

Brown, Germaine
Administrative Assistant 3, Facility Services and Capital Projects

Buehler, Kris
Project Coordinator, Snake River Salmon Recovery Board
B.S., University of Wisconsin; M.S., Utah State University

Burgess, Jesse
Instructor, Transitional Studies/Humanities
B.A., Whitman College; M.A., California State University

Burnett, Ginger
Instructor, Basic Skills - Washington State Penitentiary
A.A., Walla Walla Community College; B.A., Walla Walla University

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
BUSH, Shelly  
Secretary Senior, Student Services - Clarkston Campus

Bushong, Ross  
Instructor, Graphic Design - Coyote Ridge Corrections Center  
A.A., Collins College

Cagle, Karin  
Administrative Assistant 3, Corrections Education - Washington State Penitentiary  
A.A.A.S., Walla Walla Community College

Can, Angelica  
Program Assistant, Allied Health and Safety Education  
A.A.A.S., Walla Walla Community College

Carambot, Lori  
Financial Analyst/Special Projects, Business Services  
A.A., Walla Walla Community College; B.S., Eastern Oregon University

Carico, Jack  
Information Technology Specialist 3, Technology Services

Casali, Phillip  
Custodian 3, Facility Services - Clarkston Campus

Casey, Karen  
Fiscal Analyst 3, Business Services  
A.A.A.S., Walla Walla Community College

Cassotto, Kimberly  
Director, High School Programs  
B.A., University of Washington; M.Ed., Eastern Washington University

Caulk, Brent  
Assistant Director, Corrections Education - Washington State Penitentiary  
B.A., M.Ed., Eastern Washington University

Chamberlin, Lisa  
eLearning/Evening Coordinator, Extended Learning  
B.A., Central Washington University; M.Ed., City University of Seattle

Charlo, Jennifer  
Program Support Supervisor 2, Health Science Education - Clarkston Campus  
B.A., Eastern Washington University; M.B.A., Western Governors University

Chase, Cody  
Instruction & Classroom Support Technician 1, Corrections Education - Washington State Penitentiary

Chavez, Norma  
Program Assistant, Student Development Center

Chavez, Ricardo  
Instructor, Basic Skills - Coyote Ridge Corrections Center  
B.A., Eastern Washington University

Chavez, Rolando  
Custodian 1, Facility Services

Clark, Sue  
Secretary Senior, Arts & Sciences

Cobb, Sandra  
Fiscal Technician 2, Business Services

Combos, Kevin  
Network Administrator, Technology Services  
A.A.A.S., Walla Walla Community College

Cook, Jessica  
Development Specialist, Foundation

Coulston, Cullen  
Instructor, John Deere Agricultural Technology  
A.A.A.S., Walla Walla Community College

Cranston, Holly  
Office Assistant 3, Student Development Center

Danley, Janet  
Director, Clarkston Campus  
B.A., Northern Montana College; M.A., University of Montana; Ed.D., University of Arkansas at Little Rock

Dehonor, Brenda  
Program Assistant, Worker Retraining  
A.A.A.S., Walla Walla Community College

Dehonor Orozco, Edlyn  
Office Assistant 3, Transitional Studies  
A.A., Walla Walla Community College

Dejean, Jennifer  
Instructor, Business Management  
M.B.A., Northwest Nazarene University; B.A., Pacific University

Delgadillo, Carlos  
Director/Registrar, Office of Admissions & Records  
B.S., U.S. Air Force Academy; M.A., Northern Michigan University

Demianew, Shelly  
Program Coordinator, Corrections Education - Washington State Penitentiary  
A.A.A.S., Walla Walla Community College

Devary, Cynthia  
Administrative Assistant to the Vice President of Instruction

Diaz-Alvarado, David  
Custodian 1, Facility Services

Dimak, Todd  
Maintenance Mechanic 1, Facility Services

Donahue, Timothy  
Winemaker/Instructor, Enology  
B.S., University of Northern Colorado; M.S., University of Adelaide, Australia

Echtkenamp, Les  
Instructor, John Deere Agricultural Technology  
A.A.S., Northeast Technical Community College; B.A., Wayne State College, Nebraska

Egbert, Sara  
Instructor, Chemistry/Math - Clarkston Campus  
B.S., Lewis-Clark State College; Ph.D., University of California, Irvine

Emigh, Jill  
Instructor, Nutrition  
B.S., Montana State University; C.J.F., American Farrier Association

Enrikin, Jay  
Instructor, Culinary Arts  
Culinary Arts Degree, Western Culinary Institute

Eriksen, Debra  
WorkFirst Director, Workforce Education  
A.A., Walla Walla Community College

Evensen, Brian  
Instructor, Electrical/Energy Systems Technology  
Certified Journeyman Wireman, National Electrical Contractors Association

Failing, Keenan  
Instructor and Classroom Support Technician 4, Academic Education  
B.S., Oregon State University; B.A., Washington State University

Fidge, Luke  
Information Technology Technician 2, Technology Services, A.A.A.S., A.A., Walla Walla Community College

Figueroa, Roberto  
Instructor, Corrections Education - Coyote Ridge Corrections Center  
B.A. and M.A., University of Hawaii

Fleck, Amanda  
Fiscal Analyst 3, Business Services

Fogg, Davina  
Vice President of Financial Services  
B.S., Walla Walla University; Certified Public Accountant

Foltz, John  
Lead Entity/RTT Coordinator, Snake River Salmon Recovery Board  
B.S., Ohio State University; M.S., Washington State University

Foote, Ginny  
Educational Planning & Transitions Specialist - Clarkston Campus  
B.S., M.S., University of Idaho

Frazier, Debora  
Instructor, Agriculture/Economics  
B.S., M.A., Washington State University

Furstenberg, Becky  
Credentials Evaluator 3, Office of Admissions & Records

Gabbard, Becky  
Instructor, High School Programs/Transitional Studies  
B.A., University of Cincinnati

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Gardea, Victor
Instructor, Welding - Washington State Penitentiary
A.A.S, Spokane Community College

Garland, Cindi
Assistant Director, Corrections Education - Coyote Ridge Correction Center
B.A., Eastern Washington University; M.A., Heritage College

Geist, Shari
Office Assistant 3, Business Office - Clarkston Campus
A.A.A.S., Walla Walla Community College

Gibbard, Corey
Program Assistant, Financial Aid
A.A.A.S, Walla Walla Community College

Gibbard, Daylan
Instruction & Classroom Support Technician 1 - Autobody, Corrections Education - Washington State Penitentiary
A.A.A.S, Walla Walla Community College

Gibby, David
Instruction and Classroom Support Technician 1, Corrections Education - Coyote Ridge Corrections Center

Gilmore, Jessica
Dean of Business, Entrepreneurial Programs & Extended Learning
M.A., Gonzaga University

Gitchel, Karin
Completion Coach/Equity Specialist, Student Development Center
B.S., Pacific Union College

Godinez, Jose
Accounting Supervisor, Financial Services
B.A., University of Washington

Gonzalez Gutierrez, Erika
Fiscal Technician 2, Payroll
A.A.A.S, Walla Walla Community College

Goodall, Cathy
Secretary Senior, Professional-Technical Education
A.A.S, Spokane Falls Community College; A.A.A.S, Walla Walla Community College

Graham, Sandra
Transition Specialist, Health Science Education
A.S.N., B.S., Walla Walla College; M.S.N., University of Phoenix

Grant Fortney, Debra
Secretary Senior, Student Support Services, TRIO
A.A., Walla Walla Community College

Greene, Robin
Instructor, Computer Technology
B.S., Western Oregon State College

Griffith, William
Director, Agriculture Center of Excellence

Grubb, Aurales
Assistant Director, Financial Aid
A.A., Walla Walla Community College

Gustafson, Devon
Instructor, Sociology/Psychology - Clarkston Campus
B.A., M.A., Western Washington University

Haggard, Michael
Instructor, Welding Technology
A.A.S., Columbia Basin College; C.W.I., C.W.E., American Welding Society; W.A.B.O.

Hailey, Patricia
Office Assistant 3, Corrections Education - Coyote Ridge Corrections Center

Harder, Patricia
Coordinator, Testing & Student Programs, Corrections Education - Coyote Ridge Correction Center
B.A., Washington State University

Harding, Larry
Instructor, Carpentry - Washington State Penitentiary
Journeyman Carpenter

Hardman, Justin
Instructor, Automotive Mechanic Technology - Coyote Ridge Corrections Center
B.A., Washington State University; B.S., Webster State University

Hartford, Sherry
Director, Human Resources
B.A., Washington State University; M.A., Gonzaga University

Harvey, Kristen
Instructor, Mathematics
M.A., Walla Walla University; B.A., Whitman College; M.A., Walla Walla University

Harvey, Steven
Instructor, Commercial Truck Driving

Hatfield, Max
Instructor, Building Maintenance - Coyote Ridge Corrections Center

Haun, James
Instructor, Automotive Repair Technology
A.A.S, Columbia Basin College

Hays, Michael
Instructor, Occupational Support
A.A., Walla Walla Community College; B.A., Eastern Washington University

Hazard, Robert
Women's Basketball Coach/Assistant Athletic Director, Women's Programs/Financial Aid Advisor/Instructor, Athletics/Student Services
A.A.A.S, North Idaho College; B.S., University of Idaho

Hector, Frances
Secretary Senior, John Deere Technology/Diesel Mechanics

Heller, Richard
Instructor, Diesel Technology
B.S., Walla Walla University

Herrmann, Diana
Transfer Advising Specialist, Student Development Center
A.A., Walla Walla Community College; B.A., M.Ed, Washington State University

Himmelberger, Mona
Assistant Director of Finance & Payroll, Business Services
B.S., DeVry University

Hiner, Grace
Instructor, Nursing
B.S.N., Walla Walla University; M.S.N., University of Texas Health Science Center; Neonatal Nurse Practitioner, NCC Certification; Pediatric Nurse Practitioner Advanced Certificate, Hunter College; Family Nurse Practitioner, Washington State University

Hinshaw, Brent
Graphic Design Supervisor, Marketing, Media and Graphics
B.S., Walla Walla University

Hodgen, Danielle
Director, Financial Aid
B.A., Eastern Washington University

Hodgen, Kenneth
Information Technology Technician 2, Information Technology
A.A.S, Spokane Community College

Holeczek, Melissa
Instructor, Watershed Ecology
B.S., University of Idaho; M.N.S., Idaho State University

Houdak, Michael
Instructor, Refrigeration and Air Conditioning/Coordinator, CliffStar Job Skills
A.A.A.S, Spokane Community College

Hough, John
Instructor, AEP Math
Master in Teaching, Heritage University

Huminsky, Jordan
HVAC Instructor, Correction Education - Coyote Ridge Corrections Center
Air Conditioning Technology Certificate, Universal Technical Institute

Hurin, Patricia
Perkins Articulation Pathways Coordinator
A.S., Northern Montana College; B.S., Montana State University

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Huse, Michael  
Coordinator, Information Technology - Washington State Penitentiary/Coyote Ridge Corrections Center  
A.A., A.A.A.S., A.A.A.S., Walla Walla Community College  

Inman, Gary  
Fiscal Analyst 5, Business Services  
B.A., University of Tennessee  

Inzunza, Miguel  
Financial Aid Coordinator/Completion Coach, Student Services - Clarkston  

Isakson, Dean  
Stockroom Attendant 3, Purchasing Department  

Jackson-Vance, Jackson  
Library and Archives Paraprofessional 5, Library Services - Clarkston Campus  
M.L.S., University of Arizona  

James, Janice  
Instructor, Basic Skills - Washington State Penitentiary  
B.A., University of Delaware; M.A., Rutgers University; Ph.D., Indiana University  

Jaque, Carlos  
Director, Special Populations  
B.S., Walla Walla University  

Johnson, Maureen  
Secretary Senior, Water and Environmental Center  

Jones, Sharon  
Custodian 1, Facility Services  
A.A.A.S., Walla Walla Community College  

Jones, Sherri  
Instructor, Nursing  
B.S.N., M.S.N., University of Phoenix  

Jordan, Sandra  
Director, Student Support Services, TRiO  
A.A., Walla Walla Community College; B.A., Eastern Washington University; M.Ed., Washington State University  

Kammers, Denise  
Academic Coordinator/Chief GED® Examiner, Corrections Education - Washington State Penitentiary  
A.A., Walla Walla Community College; A.A.S., Columbia Basin College; B.A., Washington State University; M.A., Gonzaga University  

Kay-Shoemake, Jeanine  
Instructor, Biological Sciences  
B.S., M.S., San Diego State University; Ph.D., Idaho State University  

Kennedy, Doreen  
Administrative Assistant to the Vice President of Student Services  
A.A.A.S., Walla Walla Community College  

Killgore, Kelby  
Maintenance Mechanic 2, Facility Services  
B.S., Eastern Oregon University  

Kirkwood, Karen  
Instructor, Pre-College  
B.A., Washington State University; M.F.A., Portland State University  

Klein, George  
Turf Equipment Mechanic, Facility Services  
A.A.A.S., Walla Walla Community College; B.S., Oregon Institute of Technology  

Knapp, Lynn  
Instructor, ESL  
B.S., University of Minnesota; M.A., University of Idaho  

Knowles, Shareen  
Instructor, Basic Skills - Washington State Penitentiary  
B.A., Western Washington University; M.Ed., Walla Walla University  

Kress Van Slyke, Courtney  
Instructor, Transitional Studies  
M.Ed., University of Montana  

Kruper, Jan  
Instructor, Psychology  
B.A., Bucknell University; M.A., Ph.D., Clark University  

Lafran, Russell  
Instructor, English/Literature  
B.A., Eastern Oregon University; M.F.A., Eastern Washington University  

Lane, Linda  
Instructor, Business Education - Clarkston Campus  
B.S., City University; M.Ed., University of Idaho  

Lange, Judith  
Fiscal Specialist 2, Payroll  
L.P.N., A.A., Walla Walla Community College; B.S., Eastern Oregon University  

Laroche, Michael  
Catering Chef, Culinary Arts  
A.A.A.S., Shoreline Community College  

Law, Denise  
Bookstore Manager Assistant, Business Services  

Lawyer, Ashley  
Instructor, Cosmetology  
A.A.A.S., Walla Walla Community College  

Leber, Jennifer  
Instructor, Developmental Education Mathematics  
A.A., Blue Mountain Community College; B.A., Washington State University; M.T.E., Eastern Oregon University  

Leonetti, Sandra  
Program Specialist 2, Office of Admissions & Records  

Lewis, Maisee  
Program Assistant, Financial Aid  

Lincoln, Miranda  
Retention Specialist, TRiO/Student Support Services  

Loney, Ian  
Information Technology Technician 2, Information Technology  
A.A., Walla Walla Community College  

Loney, William  
Water Technology/Management Instructor  
AAAS, Walla Walla Community College  

Loomer, Kevin  
Instructor, Theatre Arts  
B.A., Whitman College; M.Div., Fuller Theological Seminary  

Loper, Shane  
Director of Facility Services and Capital Projects  

Loseth, Lori  
Instructor, Science - Clarkston Campus  
B.S., Nebraska Wesleyan University; M.S., Baylor University; Ph.D., University of Idaho  

Lueck, Sabrina  
Instruction & Classroom Support Tech 1, Enology & Viticulture  
B.S., Cornell University  

Luzzo, Teresa  
Instructor, Basic Skills - Coyote Ridge Correction Center  
B.A., Seattle University; M.A., University of Phoenix  

Lyons, Francis  
Instructor, Accounting  
B.A., University of Texas; M.B.A., City University  

Lyons, Gerald  
Instructor, Basic Skills - Washington State Penitentiary  
B.A., Washington State University; M.Ed., Northwest Nazarene University  

Macon Moore, Stephanie  
Instructor, Nursing - Clarkston Campus  

Mahan, Krista  
Instructor, Office Technology  
B.S.Ed., M.Ed., University of Idaho  

Mahan, Michael  
Instructor, Biological Sciences  
B.S., B.S.Ed., M.N.S., University of Idaho  

Maine, Brittany  
Nursing Skills Practice Lab Coordinator  
B.S., Walla Walla University  

Markwalter, Rebecca  
Secretary Senior, Health Science Education  

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Marr, Denise  
Administrative Assistant 3, Foundation Office

Marsh, Scott  
Dean of Arts & Sciences  
B.A., University of California-Riverside; M.F.A., University of Utah

Martin, Stephen  
Director, Snake River Salmon Recovery Board  
A.A., Walla Walla Community College; B.S., M.S., Eastern Washington University

Mason, Bradley  
Coordinator, Allied Health and Safety Education  
R.T. Certificate, Creighton University; R.R.T.

Mau, Christopher  
Instruction and Classroom Support Technician 2 - Clarkston Campus  
B.S., University of California, Davis; Ph.D., University of California, Los Angeles

May, Steven  
Instructor, Physical Sciences  
B.S., Western Washington University; M.S., Stanford University

Mayberry, Patty  
Fiscal Technician 2, Business Services  
Interior Design Merchandising Certificate and Computer Application Specialist Certificate, Walla Walla Community College

Mc Connell, Virginia  
Instructor, English/Business - Clarkston Campus  
B.A., College of St. Rose; M.A., Purdue University; J.D., Golden Gate University

Mc Evoy, Rosie  
Program Assistant, Financial Aid

McCauley, Nicole  
Retention Specialist, TRIO, Student Support Services  
B.A., Whitworth College; M.A., Macquarie University

McGehee, Kaye  
Instructor, Nursing - Clarkston  
B.S.N., Washington State University

McGuire, Tony  
Instructor, Building Maintenance - Corrections Education, Washington State Penitentiary  
EMT-B Certification, Walla Walla Community College

Meagher, Carolyn  
Office Assistant 3, Corrections Education - Washington State Penitentiary

Meier, Janelle  
Library and Archives Paraprofessional 6, Library Services  
A.A., Walla Walla Community College

Meliah, David  
Advisor/Liaison to Professional Technical Programs/Head Baseball Coach/Sports Information Coordinator, Athletics/Professional Technical Programs  
A.A., Walla Walla Community College; B.A., Washington State University

Mellish, Daniel  
Coordinator, Transportation and Diesel Job Shop

Mendez, Genesis  
Administrative Assistant 2, Corrections Education - Coyote Ridge Corrections Center

Meyer, Michelle  
Counselor, Student Development Center  
B.S., University of Puget Sound; M.A., Saint Martins College

Miller, Charles  
Instructor, Electrical  
A.A.A.S., Walla Walla Community College

Miller, Rhonda  
Secretary Senior, Auto Mechanics Technology  
A.A., Walla Walla Community College

Mills, Chet  
Instructor, Refrigeration and Air Conditioning - Washington State Penitentiary  
A.A.A.S., Walla Walla Community College

Miltenberger, Chad  
Assistant Director, Professional-Technical Recruitment and Retention Specialist - Clarkston Campus  
B.S., Lewis-Clark State College; M.S., Ph.D., University of Idaho

Mitchell, Tami  
Coordinator/Instructor, Medical Assisting Program  
Practical Nursing Certificate, A.A.A.S., A.D.N., Walla Walla Community College

Moulton, Magdalena  
Educational Planning & Transitions Specialist, Workforce Education  
A.A., Walla Walla Community College

Nally, Sherry  
Administrative Assistant to the Vice President of Financial Services

Neissl, Mindy  
Human Resource Consultant Assistant 2, Human Resources

Nelson, Anne  
Business Management Instructor, Academic Education

Nelson, Jerry  
Custodian 1, Facility Services

Norton, Daniel  
Instructor, Auto Body Technology  
A.A.A.S., Walla Walla Community College

Ortiz, Denise  
Instructor, English  
B.A., Eastern Oregon State College; M.A., Washington State University

Ortiz-lopez, Rigoberto  
Custodian 3, Facility Services

Palmer, Susan  
Instructor, Sociology  
B.A., M.A., University of Toledo

Pearson, Susan  
Instructor, Basic Skills - Washington State Penitentiary  
A.A., Walla Walla Community College; B.S., Oral Roberts University; M.Ed., Grand Canyon University

Peitersen, James  
Instructor, American Studies  
A.A., Walla Walla Community College; B.A., M.A., Washington State University

Penner, Dwight  
Instructor, Diesel Technology Instructor - Washington State Penitentiary  
A.A.S., Portland Community College

Peters, Deborah  
Early Learning Coalition

Peterson, James  
Vice President of Administrative Services  
B.S., M.A., Washington State University

Phillips, Curtis  
Title III Faculty Development Activity Director/e-Learning Instructional Design Coordinator  
B.A., Eastern Washington University; M.Ed./AEDL, University of Phoenix; Doctorate, A.T. Still University

Polson, Kerri  
Fiscal Specialist 1, Business Services  
A.A.A.S., Walla Walla Community College

Popick, Jeffrey  
Instructor/Vinyardist, Enology & Viticulture

Prest, Stacy  
Director, Library Services  
B.A., Colorado Womens College, M.L.I.S., University of Washington

Queen, Rick  
Instructor, Building Maintenance - Washington State Penitentiary

Seana Queen  
Fiscal Technician 2, Business Services

Rammelsberg, Susan  
Program Coordinator, Health Science Education - Clarkston Campus  
B.S.N., Washington State University; M.S.N., Gonzaga University

Ramsey, Jerri  
Executive Assistant to the President

Ramsey, Marleen  
Vice President of Instruction, Chief Instructional Officer  
B.S., Walla Walla College; M.A., Washington State University; Ph.D., Gonzaga University

Randall, Amber  
Program Coordinator, Testing, Student Development Center  
A.A., Walla Walla Community College; B.A., Western Washington University
Rasmussen, Lisa  
Instructor, Fine Arts  
A.A., Walla Walla Community College; B.A., Whitman College; M.A., Eastern Washington University

Reed, Danielle  
Program Assistant, Technology Services  
A.A.A.S., Walla Walla Community College

Reed, Regina  
Coordinator, Testing and New Student Programs, Student Development Center  
A.A., Walla Walla Community College; B.A., Central Washington University; M.Ed., Walla Walla University

Reinland, Jeffrey  
Athletic Director/Men's Basketball Coach, Athletics  
A.A., Walla Walla Community College; B.A., Eastern Washington University; M.S., Central Washington University

Reyna, Manuel  
Custodian 1, Facility Services

Reyna-bravo, Angel  
Dean of Workforce Education  
B.A. and M.Ed., Washington State University

Richardson, Dennis  
Instructor, Graphic Design - Washington State Penitentiary  
B.F.A., Northern Arizona University; M.A.T., Walla Walla University

Robinett, Cynthia  
Instructor, Biological Sciences - Clarkston Campus

Robles, Miguel  
Information Technology Technician 2, Technology Services  
A.A.A.S., Walla Walla Community College

Rohrbach, Marco  
Custodian 1, Facility Services - Clarkston Campus

Rojas-ortiz, Diana  
Custodian 1, Facility Services

Rooks, Ronald  
Instructor, Civil Engineering Technology  
B.S., Oregon State University; Professional Engineer, State of Washington, Oregon, Idaho

Rossi, Debra  
Program Assistant, Testing Center  
B.A., Washington State University

Rostollan, Michael  
Instructor, Professional Golf Management/Men's and Women's Golf Coach  
A.A., Walla Walla Community College; B.A., Eastern Washington University; Certified PGA Golf Professional

Russo, Ruth  
Instructor, Chemistry  
B.S., Gonzaga University; Ph.D., Johns Hopkins University

Ruzicka, Vincent  
Assistant Director, Student Activities  
A.A., Walla Walla Community College; B.S., Eastern Washington University

Sachs, Julianne  
Instructor, Mathematics  
B.A., B.S., M.S., Western Washington University

Saldana pedroza, Rene  
Custodian 1, Facility Services  
A.A., Walla Walla Community College

Samitore, Wendy  
Interim Vice President of Student Services  
B.A., Western Oregon University; M.T.E., Eastern Oregon University

Sampson, Gerald  
Instructor, Computer Technology  
A.A., Blue Mountain Community College; B.S., Eastern Oregon University

Sanders, Sonja  
Instructor, ABE/GED - Clarkston Campus  
A.A.S., B.S., Lewis-Clark State College

Scharnhorst, Debra  
Information Technology Specialist 2, Technology Services - Clarkston Campus  
A.A.A.S., Walla Walla Community College

Schmode, Michelle  
Civil Engineering Technology Instructor - Workforce Education  
B.S., Oregon State University; M.S., Texas AM University; M.A., University of Phoenix

Schnorr, Gregory  
Instructor, Culinary Arts  
A.A.S., Art Institute of Colorado; Baking Certificate, Culinary Institute of America

Schoessler, Megan  
Instructor, Mathematics  
M.A.T. in Mathematics, University of Idaho

Schueller, Laura  
Instructional Support Coordinator, Center for Academic Success  
B.S., Pennsylvania State University; M.A., Ph.D., University of Kentucky

Schultz, Katie  
Secretary Supervisor - Clarkston Campus  
A.A.A.S., A.A.A.S., A.A.A.S., Walla Walla Community College; B.S., Lewis-Clark State College

Schula, Eric  
Instructor, Mathematics  
B.S., Seattle Pacific University; M.S., University of Washington

Scott, Claude  
Grounds and Nursery Services Specialist 5, Facility Services

Scudder, Chris  
Grounds and Nursery Services Specialist 2, Facility Services

Sears, Cassie  
Secretary Senior, High School Programs

Selde, Cynthia  
Assistant Academic Coordinator, Corrections Education - Washington State Penitentiary  
M.Ed., Endicott College/Mexico; M.A., University of the Americas, Mexico  
B.A., University of the Americas, Mexico

Selwitz, Jason  
Project Manager, Agriculture Center of Excellence  
B.S., Penn State; M.S., California State Polytechnic University, Pomona

Semenko, Pavel  
Coordinator, Automotive and Industrial Equipment Job Shop  
Technical School Diploma, Macrop P.T.S., Russia; Certificate of Completion Auto Body Program, Walla Walla Community College

Senderhauf, Theresa  
Data and Assessments Specialist, Instructional Planning, Research and Assessment  
B.S., The University of Montana

Seney, Debra  
Office Manager, Snake River Salmon Recovery Board

Shevchenko, Ivan  
Automotive Mechanic Trainee

Shively, Michael  
Mathematics Instructor, Clarkston Campus  
B.S., Lewis-Clark State College; M.S., University of Idaho

Shoemake, Stephen  
Instructor, Biological Sciences  
B.S., University of Puget Sound; M.S., D.A., Idaho State University

Simmelink-johnson, Staci  
Instructor, Psychology  
B.A., Whitman College; M.S., Ph.D., Colorado State University

Simon, Thomas  
Instructor, Music/Director, Jazz and Pep Bands  
B.A., University of Washington; M.A., University of Michigan

Skorina, Frank  
Instructor, Engineering/Physics  
B.S.M.E., M.S., Union College, New York; M.S., Columbia University

Slepin, Joshua  
Research Analyst, Institutional Planning & Assessment  
B.A., Emory University; M.A., University of Chicago

Small, Joe  
Dean, Corrections Education - Washington State Penitentiary and Coyote Ridge Corrections Center  
B.S., Washington State University; M.S., Ed.D., University of Idaho

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Smith, Kathryn
Program Assistant - Clarkston Campus

Smith, Shana
Instructor, Mathematics
M.A., Mathematics Education, DePaul University, Chicago, Illinois

Snell, Janet
Fiscal Analyst 3, Business Services
B.S., Walla Walla University

Snell, Kelly
Worker Retraining Manager, Workforce Education
M.A., Western Governors University

Snider, Darlene
Dean, Transitional Studies
B.S., Trinity Western University; M.A.T., School for International Training

Spee, Chelsie
Volleyball Coach, HPER Instructor

Stahneke, Gwen
Ag. Chemistry/Turf Management Instructor
Ph.D., University of Nebraska-Lincoln; M.S., Texas A & M University; B.S., University of Illinois

Stanger, Lakatherine
Office Assistant 3, Agriculture Center of Excellence
A.A.A.S., Walla Walla Community College

Stevenson-McClure, Cindy
Instructor, Psychology
B.A., Whitman College; M.A., City University; Ph.D., Walden University

Stockdale, David
Director of the Water & Environmental Center
B.S., Purdue University- Main Campus; M.S., University of Houston

Storey, Joann
Instruction & Classroom Support Technician 2 - Clarkston Campus
B.S.; B.S.N., Lewis-Clark State College

Storms, Bill
Director, Technology Services
A.A., Centralia College; B.A., Eastern Washington University

Storms, Katherine
Secretary Senior, Human Resources

Stutesman, Jennifer
Reference Librarian, Library Services
M.L.I.S., University of Washington; B.A., University of Central Florida

Sullivan, Deanna
Office Assistant 1, Health Science Education - Clarkston Campus

Swan-froese, Danielle
Assistant to the Director of Enology and Viticulture
B.S., Oregon State University

Taylor, Jennifer
Library and Archives Paraprofessional 2, Library Services
A.A.A.S., Walla Walla Community College

Taylor, Loretta
Director, Corrections Education - Coyote Ridge Correction Center
B.A., Washington State University; M.A., University of Phoenix

Thiessen, Dan
Executive Director/Instruction, Culinary Arts Program
A.O.S., Culinary Institute of America

Thorne, Brian
Custodian 5, Facility Services
A.S., Modesto Junior College

Toelke, Lana
Instructor, Nursing
B.S.N., Pacific Union College; M.N., Washington State University

Toon, Timothy
Director of Student Activities, Assistant Dean of Arts & Sciences
B.S., Brigham Young University; Hawaii; M.Ed., Stephen F. Austin State University

Trick, Terri
Instructor, Basic Skills
B.A., University of Utah; M.Ed., Washington State University

Umfleet, Lori
Instruction Technology Assistant, Clarkston Campus

Van cleave, Kent
Office Assistant 3, Information Center
B.S., Linfield College

Van dyke, Peter
Instructor, Biological Sciences
B.S., Washington State University; D.V.M., Washington State University

Van slyke, John
Instructor, History
B.S., University of Wisconsin; M.S., University of Montana

Vanausdle, Steven
President
B.S., M.S., Washington State University; Ph.D., The Ohio State University

Velazquez, Jose
Custodian 1, Facility Services
A.A.A.S., A.A.A.S., Walla Walla Community College

Velluzzi, Nicholas
Director of Planning, Research and Assessment
B.A., M.A., Ph.D., University of Washington

Verwer, Ilona
Instructor, Nursing
A.D.N., Walla Walla Community College; B.S.N., Hogeschool Enschede, The Netherlands; M.S.N./ED, University of Phoenix

Vorhauer, Stephen
Instructor, Welding Technology - Coyote Ridge Correction Center
A.A.A.S., Walla Walla Community College

Walk, David
Manager, Advertising and Media Services

Waltner, David
Maintenance Mechanic 2, Facility Services
B.A., Northern Nazarene College

Warnberg, Sigurd
Grounds and Nursery Services Specialist 2, Facility Services
A.A.A.S., Walla Walla Community College

Weigand, Tessa
Opportunity Grant Coordinator/Funding Advisor, Career and Employment Services Center
B.A., Washington State University

Wellington-Baker, Kristi
Interim Director, Student Development Center
A.A., Walla Walla Community College; B.A., Eastern Washington University; M.S.W., Walla Walla University

Wheeler, Julie
Instructor, Basic Skills

White, Amy
Retail Clerk Lead, Bookstore

Whitehurst, Corinna
Library & Archives Paraprofessional 2, Library Services
A.S., Cuesta College

Wilde, Michelle
Fiscal Technician 2, Business Services

Williams, Jana Lu L
Faculty Librarian, Library Services
B.S., Willamette University; M.L.I.S., University of Washington

Williams, Matthew
Instructor, Agriculture Science (Plant & Soil Science)
A.A., Walla Walla Community College; B.S., M.S., Washington State University

Williams, Melissa
Director, Marketing, Media and Graphics
A.A., Walla Walla Community College; B.A., Washington State University

Williams, Wanda
Program Coordinator, Athletics Department
A.A., Walla Walla Community College

Willis, Sue
Director of Budget & Finance, Business Services
B.A., Walla Walla University

Winnett, Wallace
Director, John Deere Agricultural Program
A.A.A.S., Walla Walla Community College
FACULTY, STAFF AND ADMINISTRATORS

Worden, Jodi
Extended Learning Coordinator

Worley, Jeanne
Office Assistant 2, Corrections Education - Washington State Penitentiary

Young, Donna
Secretary Senior, Workforce Education

Zabos, Dave
Information Technology Specialist 2, Technology Services
A.A., A.A.A.S., Walla Walla Community College

Zaragoza, Rosaura
Office Assistant 3, Transitional Studies
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

124 Linda Lane, Accounting, Business, and Office Technology
126a Adjunct Instructors
126b Adjunct Instructors
126c Devon Gustafson, Social Sciences
126d Lori Umfleet, IT
126e Debbie Scharnhorst, IT
130 James Bower, Humanities
132 Sonja Sanders, ABE/GED
   Virginia Foote, WorkFirst and BFET
   Sandra Evans, ESL
133 Paul Boyd, Transitional Studies
146 Tami Mitchel, Medical Assisting
147 Virginia McConnell, English Composition and Literature
150 Adjunct Instructors
152 Cynthia Robinett, Science
160a Christopher Mau, Science Lab Manager and Tutor Center Coordinator
163a Lori Loseth, Science
163b Sara Egbert, Chemistry and Mathematics
163c Michael Shively, Mathematics
172 Phillip Casali and Marco Rohrbach, Facilities and Grounds

**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