



# AGRICULTURAL SCIENCES

## Program of Study



**Career Cluster:** Agriculture, Food and Natural Resources

**Career Pathway:** Natural Resources Systems

This Career Pathway Program of Study can serve as a guide along with other career planning materials as learners continue on a career path. Courses listed within this program are only recommended coursework and should be individualized to meet each learner's education and career goals. The courses outlined below are only RECOMMENDATIONS.

Course offerings may vary from high school to high school. Additionally, a PPR (Personalized Pathway Requirement) may be used in lieu of some of the World Language and/or Art credit requirement. See your high school counselor for additional graduation requirement information.

**PPR – Personal Pathway Requirement** \*World Language – 2.0 credit may be met through a PPR \*\*Art – 1.0 credit may be met through a PPR

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies	Other Requirements	Electives	Summer School Offerings High School Credit Free of Charge
<b>MS</b>	<b>6-8</b>	Grade Level ELA	Grade Level Math	Grade Level Science	Grade Level Social Studies		STEM Classes	<b>Summer School Available After the 8<sup>th</sup> Grade Year</b>
<b>High School</b>	<b>9</b>	ELA 9	Integrated Math I OR Intensive Integrated Math I	Physical Science		Health (.5) PE (.5) World Language* Art**	<b>CTE &amp; Elective Options to be Taken Grades 9-11</b>  <ul style="list-style-type: none"> <li>● Intro to Agriculture</li> <li>● Intro to Animal Science</li> <li>● Intro to Vet Medicine</li> <li>● Greenhouse Science</li> <li>● Greenhouse Management</li> <li>● Environmental Science Resource Mgmt. 101: Forestry &amp; Society</li> <li>● AP Environmental Science</li> <li>● Introduction to Business</li> <li>● Entrepreneurship</li> <li>● Culinary 1</li> <li>● Culinary 2</li> <li>● Culinary 3</li> </ul>	<b>PCSC Summer School</b>  Business and Marketing A Culinary Arts Intro to Nutrition and Fitness Pre-Veterinary Technology  See PCSC Summer School application for additional course offerings at other PCSC summer school locations. Offerings also include CTE classes that may satisfy academic credit graduation requirements – specifically in art, PE, and health.
	<b>10</b>	ELA 10	Integrated Math II	Biology; AP Biology OR AP Environmental Science	World History OR AP World History	PE World Language* Art**		
	<b>11</b>	ELA 11 OR AP Language	Integrated Math III OR Applied Algebra 2	Chemistry OR Greenhouse Science	US History OR AP US History	PE		
	<b>12</b>	ELA 12 OR AP Lit	Consumer Math OR Pre-Calculus OR AP Calculus	Greenhouse Management	Civics & Economics OR AP Government			
<b>Credit Equivalency, Certifications &amp; Dual Credit</b>	<b>High School Credit Equivalency:</b>  Science CTE			<b>Certifications Earned at OHS:</b>			<b>Articulation/Dual Credit: (DC)</b> Bates - (Culinary and Business) – 10 CREDITS Clover Park Technical College (Culinary, Business and Environmental Science) – 24 POTENTIAL CREDITS  <i>Articulation agreements and number of credits are subject to change</i>	

<b>Clubs and Extracurricular Activities</b>	<b>FFA</b> Future Farmers of America	<b>OHS FFA Advisor:</b> Mia Gum <a href="mailto:gumm@orting.wednet.edu">gumm@orting.wednet.edu</a>
---	---	--

## Additional Program Information

### Course Description

The Natural Resources Systems pathway enables people to perform a variety of tasks from helping to develop, maintain, and manage the forest and natural environment to catching and trapping various types of marine life for human consumption, animal feed, bait and other uses. Forest and rangelands supply wood products, livestock forage, minerals and water; serve as sites for recreational activities; and provide habitats for wildlife. Conservation scientists and foresters manage, develop, use and help protect these and other natural resources.

<p><b>Course Descriptions</b></p> <p>See the OHS Course Guide in Xello for</p> <ul style="list-style-type: none"> <li>● Intro to Agriculture</li> <li>● Intro to Animal Science</li> <li>● Intro to Vet Medicine</li> <li>● Greenhouse Science</li> <li>● Greenhouse Management</li> <li>● Environmental Science Resource Mgmt. 101: Forestry &amp; Society</li> <li>● AP Environmental Science</li> <li>● Introduction to Business</li> <li>● Entrepreneurship</li> <li>● Culinary 1</li> <li>● Culinary 2</li> <li>● Culinary 3</li> </ul>	<p><b>Local Public Post-Secondary Options</b></p> <ul style="list-style-type: none"> <li>● Bellingham Technical College</li> <li>● Clover Park Technical College</li> <li>● Green River College</li> <li>● Eastern Washington University</li> <li>● Western Washington University</li> <li>● Central Washington University</li> <li>● Washington State University</li> <li>● University of Washington</li> </ul>																						
<p><b>Careers &amp; Job Outlook</b></p> <p>There are more than 268 related careers. Visit <a href="#">Career Bridge</a> or <a href="#">Xello</a> to explore all jobs and trends</p> <p>Here is a small sample:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Occupation</th> <th style="text-align: right;">Annual Salary</th> </tr> </thead> <tbody> <tr> <td>Agriculture and Food Science Technicians</td> <td style="text-align: right;">\$41,150</td> </tr> <tr> <td>Food Scientists and Technologists</td> <td style="text-align: right;">\$70,060</td> </tr> <tr> <td>Cooks, Institution and Cafeteria</td> <td style="text-align: right;">\$32,810</td> </tr> <tr> <td>Chefs and Head Cooks</td> <td style="text-align: right;">\$53,200</td> </tr> <tr> <td>Natural Science Managers</td> <td style="text-align: right;">\$144,010</td> </tr> <tr> <td>Foresters</td> <td style="text-align: right;">\$70,050</td> </tr> <tr> <td>Fish and Game Wardens</td> <td style="text-align: right;">\$75,060</td> </tr> <tr> <td>Zoologist and Wildlife Biologists</td> <td style="text-align: right;">\$72,290</td> </tr> <tr> <td>Soil and Plant Scientists</td> <td style="text-align: right;">\$79,310</td> </tr> <tr> <td>Civil Engineers</td> <td style="text-align: right;">\$92,110</td> </tr> </tbody> </table>	Occupation	Annual Salary	Agriculture and Food Science Technicians	\$41,150	Food Scientists and Technologists	\$70,060	Cooks, Institution and Cafeteria	\$32,810	Chefs and Head Cooks	\$53,200	Natural Science Managers	\$144,010	Foresters	\$70,050	Fish and Game Wardens	\$75,060	Zoologist and Wildlife Biologists	\$72,290	Soil and Plant Scientists	\$79,310	Civil Engineers	\$92,110	<p><b>Additional career and outlook information can be found on the following websites</b></p> <p><a href="http://www.bls.gov">www.bls.gov</a>  <a href="http://www.careerbridge.wa.gov">www.careerbridge.wa.gov</a>  <a href="#">Xello</a></p>
Occupation	Annual Salary																						
Agriculture and Food Science Technicians	\$41,150																						
Food Scientists and Technologists	\$70,060																						
Cooks, Institution and Cafeteria	\$32,810																						
Chefs and Head Cooks	\$53,200																						
Natural Science Managers	\$144,010																						
Foresters	\$70,050																						
Fish and Game Wardens	\$75,060																						
Zoologist and Wildlife Biologists	\$72,290																						
Soil and Plant Scientists	\$79,310																						
Civil Engineers	\$92,110																						