

# Environmental Agriculture Option

The Environmental Agriculture option in the Environmental Sciences BS program contains a selection of agricultural sciences courses in its core. In addition, the option offers courses clustered in a category of agricultural Ecology and Production, as well as another category focused on Societal Issues related to agriculture and the environment.

This is a popular field for students both with and without direct agricultural experience from their family or personal backgrounds. The option draws students with an interest in alternative approaches to agriculture, as either a producer (e.g. organic farmer or gardener), a consumer, an environmental scientist, or all three.

Courses from a variety of fields contribute to this option, including especially horticulture, crop science, entomology, and soil science. Those in the Ecology and Production category have a science and/or agronomy orientation. They include plant and animal science courses, as well as those with a focus on cultivating a particular crop, the husbandry of specific animals, or the use of certain techniques. In the Societal Issues category, students can select courses on such topics as agricultural cooperatives, the decline in pollinators, genes and chemicals in agriculture, and food studies in a social justice perspective.

Students completing this option prepare for jobs in non-profits, urban agriculture promotion, and organic or alternative farming interests. Public sector jobs can be found in federal agencies like the Bureau of Land Management and US Department of Agriculture. Depending on their orientation, graduates may also develop skill-sets in this option to work in a variety of state and county-level jobs related to agriculture.



Bachelor of Science in Environmental Sciences  
**Environmental Agriculture Option**

Major Code 849 | Revised: 7/26/2018 | ceoas.oregonstate.edu | ceoas.undergrad@oregonstate.edu | 541-737-1201

The Environmental Agriculture option has a core of agricultural sciences courses and includes a variety of course possibilities in the areas of agricultural ecology and production, as well as societal issues related to agriculture and environmental science.

**NOTE:**

- This worksheet may not match the catalog or MyDegrees due to updates in progress.
- Classes used to fulfill requirements in the specialization cannot double count with ENSC Core. All courses must be taken for a letter grade, no S/U grades. Students must earn at least a C- in upper division (300 or higher) major/option courses.

**ENVIRONMENTAL AGRICULTURE CORE: Select a minimum of six to eight credits from below.**

On Campus	Ecampus	
<input type="checkbox"/>	--	AGRI 411 Introduction to Food Systems: Local to Global <sup>s</sup> (3)
<input type="checkbox"/>	<input type="checkbox"/>	ANS 121 Introduction to Animal Sciences (4)
<input type="checkbox"/>	<input type="checkbox"/>	BI 311 Genetics (4) [+]
<input type="checkbox"/>	--	CROP 280 Introduction to the Complexity of Oregon Cropping Systems (4)
<input type="checkbox"/>	<input type="checkbox"/>	CROP/HORT 300 Crop Production in Pacific Northwest Agroecosystems (4) [+] <b>or</b> CROP 200 Crop Ecology and Morphology (3)
<input type="checkbox"/>	<input type="checkbox"/>	ENT 311 Introduction to Insect Pest Management (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 260 Organic Farming and Gardening (3)
<input type="checkbox"/>	<input type="checkbox"/>	HORT 301 Growth and Development of Horticultural Crops (3) [+]
<input type="checkbox"/>	<input type="checkbox"/>	SOIL 205 Soil Science (3) <b>and</b> SOIL/FOR 206 Soil Science Laboratory for Soil 205 (1) <b>or</b> CSS 205 Soil Science (4)
--	<input type="checkbox"/>	SOIL 395 World Soil Resources <sup>wic/s</sup> (3) [+]

**ECOLOGY AND PRODUCTION: Select a minimum of nine credits from below.**

On Campus	Ecampus	
<input type="checkbox"/>	--	AGRI 438 Exploring World Agriculture (2)
<input type="checkbox"/>	--	ANS 215 Beef/Dairy Industries (3) [+]
<input type="checkbox"/>	--	ANS 216 Sheep/Swine Industries (3) [+]
<input type="checkbox"/>	--	ANS 217 Poultry Industries (3)
--	--	BEE 439 Irrigation Principles and Practices (4) [+] <i>[Taught at EOU]</i>
<input type="checkbox"/>	--	BOT 313 Plant Structure (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	BOT 350 Introductory Plant Pathology (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	CROP 310 Forage Production (4) [+]
<input type="checkbox"/>	--	CROP 319 Principles of Field Crop Production (3) [+]
<input type="checkbox"/>	<input type="checkbox"/>	CROP 440 Weed Management (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	ENT 322 Honey Bee Biology and Beekeeping (3)
--	<input type="checkbox"/>	FES/HORT 350 Urban Forestry (3) [+] <i>[Ecampus only]</i>
<input type="checkbox"/>	--	FES/NR 477 Agroforestry <sup>s</sup> (3) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 226 Landscape Plant Materials I: Deciduous Hardwoods and Conifer (4)
<input type="checkbox"/>	<input type="checkbox"/>	HORT 228 Landscape Plant Materials II: Spring Flowering Trees and Shrubs (4)
<input type="checkbox"/>	<input type="checkbox"/>	HORT 285 Permaculture Design and Theory: Certificate Course (4)
<input type="checkbox"/>	<input type="checkbox"/>	HORT 311 Plant Propagation (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 314 Principles of Turfgrass Maintenance (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 315 Sustainable Landscapes: Maintenance, Conservation, Restore (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 316 Plant Nutrition (4) [+]
<input type="checkbox"/>	--	HORT 351 Floriculture and Greenhouse Systems (4) [+]
<input type="checkbox"/>	--	HORT 361 Plant Nursery Systems (4) [+]
<input type="checkbox"/>	--	HORT 380 Sustainable Landscape Design (3)
<input type="checkbox"/>	--	PBG 431 Plant Genetics Recitation (1)
<input type="checkbox"/>	<input type="checkbox"/>	RNG 442 Rangeland-Animal Relations (4)

**SOCIETAL ISSUES: Select a minimum of six credits from below.**

On Campus	Ecampus	
<input type="checkbox"/>	--	AEC 372 Agricultural Cooperatives (3) [+]
<input type="checkbox"/>	--	AEC 442 Agricultural Business Management (4)
<input type="checkbox"/>	<input type="checkbox"/>	ANS 315 Contentious Social Issues in Animal Agriculture <sup>s</sup> (3)
<input type="checkbox"/>	<input type="checkbox"/>	ANTH/FCSJ 361 Food Justice (4)
<input type="checkbox"/>	--	ANTH/FCSJ 486 Anthropology of Food (4) [+]
<input type="checkbox"/>	<input type="checkbox"/>	CROP 330 World Food Crops <sup>s</sup> (3) [+]
--	<input type="checkbox"/>	ENT/HORT 331 Pollinators in Peril <sup>s</sup> (3) [+]
<input type="checkbox"/>	<input type="checkbox"/>	FES/TOX 435 Genes and Chemicals in Agriculture: Value and Risk <sup>s</sup> (3) [+]
<input type="checkbox"/>	--	GEOG 432 Geography of Food and Agriculture (3)
--	<input type="checkbox"/>	HORT 319 Restoration Horticulture (3) [+]
<input type="checkbox"/>	<input type="checkbox"/>	HORT 330/ENT 300 Plagues, Pests, and Politics <sup>s</sup> (3)
<input type="checkbox"/>	<input type="checkbox"/>	SUS 350 Sustainable Communities <sup>s</sup> (4)

400-level CROP, ENT, HORT courses may be added in consultation with an advisor.

Total Credits: 27 (Background course not included)

WIC – Writing Intensive Course

G – Contemporary Global Issues

S – Science Technology and Society

+ Course has prerequisites

