

# SUSTAINABLE ECOSYSTEMS OPTION

This option is offered within the following major(s):

- Bioresource Research - College of Agricultural Sciences (<http://catalog.oregonstate.edu/college-departments/agricultural-sciences/other-degrees-programs/bioresource-research-bs-hbs>)

Sustainable ecosystems research addresses the sustainability of agricultural, forest, rangeland, wildlife, fishery, and native ecosystems. The program aims to define and develop natural and managed ecosystems in which environmental soundness results from the conscious interaction of humans with wildlife and other components of the systems. Innovative links among scientific and humanistic disciplines will bring about increased understanding of the present and future health of natural and managed ecosystems and associated human communities. Sustainable ecosystems research is multidisciplinary: insights from sociology, political science, anthropology, or philosophy may be combined with basic concepts from biology, chemistry, and physics to support research rooted in agricultural, forestry, rangeland management or wildlife management. Students will acquire perspective by choosing among a broad variety of courses, and will participate in field, laboratory, or systems analysis projects, preparing them for graduate/professional schools or research and regulatory positions.

## Required Courses

Code	Title	Hours
<b>Ecology and Ecological Methods</b>		
Select one of the following:		3-4
BI 370	ECOLOGY	
BOT 341	PLANT ECOLOGY	
FES 341	FOREST ECOLOGY	
RNG 421	WILDLAND RESTORATION AND ECOLOGY	
BI 371	^ECOLOGICAL METHODS	3
or RNG 441	RANGELAND ANALYSIS	
<b>Ethics/Values</b>		
PHL 440	*ENVIRONMENTAL ETHICS	3
or PHL 443	*WORLD VIEWS AND ENVIRONMENTAL VALUES	
<b>Social/Political</b>		
Select one of the following:		3-4
AEC 352	*ENVIRONMENTAL ECONOMICS AND POLICY	
ANTH 481	*NATURAL RESOURCES AND COMMUNITY VALUES	
ANTH 482	*ANTHROPOLOGY OF INTERNATIONAL DEVELOPMENT	
ANS 315	*CONTENTIOUS SOCIAL ISSUES IN ANIMAL AGRICULTURE	
FOR 460	^FOREST POLICY	
FW 325	*GLOBAL CRISES IN RESOURCE ECOLOGY	
FW 340	*MULTICULTURAL PERSPECTIVES IN NATURAL RESOURCES	
HST 481	*ENVIRONMENTAL HISTORY OF THE UNITED STATES	
PS 475	ENVIRONMENTAL POLITICS AND POLICY	

SOC 480	*ENVIRONMENTAL SOCIOLOGY	
SOC 481	*SOCIETY AND NATURAL RESOURCES	
<b>Integrative/Management/ Conservation</b>		
Select one of the following:		3-4
AEC 351	*NATURAL RESOURCE ECONOMICS AND POLICY	
BA 463	FAMILY ENTERPRISE GOVERNANCE	
BI 348	*HUMAN ECOLOGY	
BOT 488	ENVIRONMENTAL PHYSIOLOGY OF PLANTS	
CROP 480	CASE STUDIES IN CROPPING SYSTEMS MANAGEMENT	
FE 430	WATERSHED PROCESSES	
FES 365	*ISSUES IN NATURAL RESOURCES CONSERVATION	
FES 477/NR 477	*AGROFORESTRY	
FES 485	*CONSENSUS AND NATURAL RESOURCES	
FOR 457	TECHNIQUES FOR FOREST RESOURCE ANALYSIS	
FOR 459	FOREST MANAGEMENT PLANNING AND DESIGN I	
FW 321	APPLIED COMMUNITY AND ECOSYSTEM ECOLOGY	
GEOG 300	*SUSTAINABILITY FOR THE COMMON GOOD	
SOIL 395	*WORLD SOIL RESOURCES (Ecampus only)	

### Specialization Courses

Select Nine to 14 credits approved by option faculty and research mentor. 9-14

Total Hours 24-32

\* Baccalaureate Core Course (BCC)

^ Writing Intensive Course (WIC)

**Option Code: 142**