

SUSTAINABILITY UNDERGRADUATE MAJOR (BS, HBS)

Also available at OSU-Cascades and via Ecampus.

The Sustainability undergraduate major is a concurrent degree subject to Academic Regulation 26 (<http://catalog.oregonstate.edu/regulations/#ar26>). This interdisciplinary double degree pairs well with all undergraduate majors.

OSU-Corvallis and Ecampus Contact

Agricultural and Life Sciences Building (ALS)
Oregon State University
Corvallis, OR 97331
Phone: 541-737-2441
Email: Sus.Advising@oregonstate.edu

OSU-Cascades Campus Contact

Matt Shinderman
Forest Ecosystems and Society
Oregon State University Cascades
Phone: 541-322-3159
Email: matt.shinderman@osucascades.edu

Major Code: 870

- Apply principles and theories of ecological science to issues of concern in environmental science, such as loss of biodiversity and use of nonrenewable resources (scientific literacy). Applies to Degree and Minor students.
- Read and interpret graphs and data, and explain sources of uncertainty in scientific data and environmental model predictions (scientific literacy). Applies to Degree and Minor students.
- Demonstrate proficiency with sustainability assessment tools and their application to various human systems. Applies to Degree and Minor students.
- Interpret and apply available data and information to create sustainable solutions for desired future community/organizational conditions. Applies to Degree and Minor students.
- Communicate sustainability while collaborating with multiple audiences with diverse backgrounds and interests. Be able to write and talk with both experts and lay people about their special interest in sustainability. Applies to Sustainability Double Degree students only (not Minors).

All OSU undergraduate students may obtain a second degree in Sustainability by completing 32 credits in addition to the 180 credits required for one Bachelor degree, for a total of 212 credits. Post-baccalaureate students may obtain a degree in Sustainability by completing the requirements below and the requirements for a subsequent degree as outlined in Academic Regulation 26b (<http://catalog.oregonstate.edu/regulations/#ar26>).

Courses in the major may be taken S/U.

Code	Title	Credits
Sustainability Core		
SUS 304	*SUSTAINABILITY ASSESSMENT	4
SUS 350	*SUSTAINABLE COMMUNITIES	4
<i>Ecological Dimensions of Sustainability</i>		
Select one course from the following:		3-4
BI 301	*HUMAN IMPACTS ON ECOSYSTEMS	
BI 306H	*ENVIRONMENTAL ECOLOGY	
SUS 102	*INTRODUCTION TO ENVIRONMENTAL SCIENCE AND SUSTAINABILITY ⁺	
<i>Social Dimensions of Sustainability</i>		
Select one course from the following:		3-4
SOC 381	SOCIAL DIMENSIONS OF SUSTAINABILITY (Ecampus only)	
SOC 480	*ENVIRONMENTAL SOCIOLOGY	
SOC 481	*SOCIETY AND NATURAL RESOURCES	
SUS 331	*SUSTAINABILITY, JUSTICE, AND ENGAGEMENT	
SUS 420	SOCIAL DIMENSIONS OF SUSTAINABILITY (Ecampus and Cascades) ⁺	
<i>Economic Dimensions of Sustainability</i>		
Select one course from the following:		3-4
AEC 250	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY	
AEC 351	*NATURAL RESOURCE ECONOMICS AND POLICY	
AEC 352/ECON 352	*ENVIRONMENTAL ECONOMICS AND POLICY	
AEC 434	[^] BENEFIT-COST ANALYSIS	
<i>Practicum</i>		
Select one of the following: ¹		3-12
SUS 401	RESEARCH	
SUS 410	INTERNSHIP ³	
SUS 499	SPECIAL TOPICS	
Remaining elective credits ⁺⁺		0-12
Total credits required for graduation is 212		

Courses that can be used to fulfill remaining elective course requirements are listed below. Students are not limited to taking courses within their primary major of study. The Sustainability Double Degree Advisor(s) will approve courses not listed here if they have an obvious link to sustainability and fulfill the intent of the Sustainability Double Degree and the student's path of study.

Remaining Electives

Code	Title	Credits
<i>Business and Economics</i>		
AEC 243	*GLOBAL POVERTY AND SUSTAINABLE DEVELOPMENT	3
AEC 250	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY	3
AEC 253	*ENVIRONMENTAL LAW, POLICY, AND ECONOMICS	4
AEC 351	*NATURAL RESOURCE ECONOMICS AND POLICY	3
AEC 352/ECON 352	*ENVIRONMENTAL ECONOMICS AND POLICY	3
BA 302	BUSINESS PROCESS MANAGEMENT	4
BA 314	SUSTAINABLE BUSINESS OPERATIONS	4
BA 351	MANAGING ORGANIZATIONS	4
BA 352	MANAGING INDIVIDUAL AND TEAM PERFORMANCE	4
BA 362	SOCIAL ENTREPRENEURSHIP AND SOCIAL INITIATIVES	4
BA 432	*ENVIRONMENTAL LAW, SUSTAINABILITY AND BUSINESS	3
BA 465	*SYSTEMS THINKING AND PRACTICE	4
BA 466	INTEGRATIVE STRATEGIC EXPERIENCE	4
ECON 202	*INTRODUCTION TO MACROECONOMICS	4
ECON 311	INTERMEDIATE MICROECONOMIC THEORY	4
ECON 315	INTERMEDIATE MACROECONOMIC THEORY	4
MGMT 452	LEADERSHIP	4

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<i>Engineering</i>			GEOG 451	PLANNING PRINCIPLES AND PRACTICES FOR RESILIENT COMMUNITIES	4
BEE 221	FUNDAMENTALS OF ECOLOGICAL ENGINEERING	3	GEOG 452	ENVIRONMENTAL ASSESSMENT	3
BEE 320	BIOSYSTEMS ANALYSIS AND MODELING	4	HORT 260	ORGANIC FARMING AND GARDENING	3
BEE 322	ECOLOGICAL ENGINEERING THERMODYNAMICS AND TRANSFER PROCESS	4	NR 201	MANAGING NATURAL RESOURCES FOR THE FUTURE	3
CCE 422	GREEN BUILDING MATERIALS	3	NR 202	NATURAL RESOURCE PROBLEMS AND SOLUTIONS	3
CHE 450	CONVENTIONAL AND ALTERNATIVE ENERGY SYSTEMS	3	NR 312	CRITICAL THINKING FOR NATURAL RESOURCE CHALLENGES	3
CHE 451	SOLAR ENERGY TECHNOLOGIES	3	NR 351	*WHEN SCIENCE ESCAPES THE LAB: SCIENCE AND RESOURCE MANAGEMENT	3
ECE 438	ELECTRIC AND HYBRID ELECTRIC VEHICLES	4	OC 333	OCEANS, COASTS, AND PEOPLE	3
ENGR 350	*SUSTAINABLE ENGINEERING	3	PH 313	*ENERGY ALTERNATIVES	3
ENVE 321	ENVIRONMENTAL ENGINEERING FUNDAMENTALS	4	SOIL 499	SPECIAL TOPICS	1-16
HEST 310	*INTRO TO COMMUNITY ENGAGEMENT AND COMMUNITY-BASED DESIGN	3	SUS 103	*INTRODUCTION TO CLIMATE CHANGE	4
<i>Natural Sciences</i>			TRAL 351	OUTDOOR RECREATION MANAGEMENT ON PUBLIC LANDS	3
AGRI 411	*INTRODUCTION TO FOOD SYSTEMS: LOCAL TO GLOBAL	3	TRAL 352	WILDERNESS MANAGEMENT	3
BI 301	*HUMAN IMPACTS ON ECOSYSTEMS	3	TRAL 354	COMMUNITIES, NATURAL AREAS, AND SUSTAINABLE TOURISM	3
BI 306	*ENVIRONMENTAL ECOLOGY	3	WSE 111	RENEWABLE MATERIALS FOR A GREEN PLANET	2
BI 347	*OCEANS IN PERIL	3	WSE 210	RENEWABLE MATERIALS TECHNOLOGY AND UTILIZATION	4
BI 348	*HUMAN ECOLOGY	3	WSE 266	*INDUSTRIAL HEMP	3
BI 351	MARINE ECOLOGY	3	WSE 320	ANATOMY OF RENEWABLE MATERIALS	3
BI 370	ECOLOGY	3	WSE 321	CHEMISTRY OF RENEWABLE MATERIALS	3
BRR 325	*ENERGY TECHNOLOGY AND SOCIAL CHANGE	3	WSE 385	*EVALUATING SUSTAINABILITY THROUGH LIFE CYCLE ANALYSIS	3
CH 374	*TECHNOLOGY, ENERGY, AND RISK	3	WSE 392	*BAMBOOLOOZA: THE FASCINATING WORLD OF BAMBOO	3
CH 390	ENVIRONMENTAL CHEMISTRY	3	WSE 453	*FOREST PRODUCTS BUSINESS	3
FES 341	FOREST ECOLOGY	3	WSE 455	INDUSTRIAL MARKETING IN THE FOREST SECTOR	3
FES 355	MANAGEMENT FOR MULTIPLE RESOURCE VALUES	3	WSE 470	*FORESTS, WOOD, AND CIVILIZATION	3
FES 365	*ISSUES IN NATURAL RESOURCES CONSERVATION	3	WSE 473	BIOENERGY AND ENVIRONMENTAL IMPACT	3
FES 435/TOX 435	*GENES AND CHEMICALS IN AGRICULTURE: VALUE AND RISK	3	Z 349	*BIODIVERSITY: CAUSES, CONSEQUENCES, AND CONSERVATION	3
FES 445/FW 445	ECOLOGICAL RESTORATION	4	<i>Social Sciences/Humanities</i>		
FES 455/HORT 455	URBAN FOREST PLANNING, POLICY AND MANAGEMENT	4	AEC 250	*INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY	3
FES 477/NR 477	*AGROFORESTRY	3	AEC 253	*ENVIRONMENTAL LAW, POLICY, AND ECONOMICS	4
FES 485	*CONSENSUS AND NATURAL RESOURCES	3	AEC 351	*NATURAL RESOURCE ECONOMICS AND POLICY	3
FES 486	*PUBLIC LANDS POLICY AND MANAGEMENT	3	AEC 352/ECON 352	*ENVIRONMENTAL ECONOMICS AND POLICY	3
FOR 462	NATURAL RESOURCE POLICY AND LAW	3	AEC 434	*BENEFIT-COST ANALYSIS	4
FW 251	PRINCIPLES OF FISH AND WILDLIFE CONSERVATION	3	AGRI 411	*INTRODUCTION TO FOOD SYSTEMS: LOCAL TO GLOBAL	3
FW 303	SURVEY OF GEOGRAPHIC INFORMATION SYSTEMS IN NATURAL RESOURCE	3	ANTH 352	*ANTHROPOLOGY, HEALTH, AND ENVIRONMENT	3
FW 321	APPLIED COMMUNITY AND ECOSYSTEM ECOLOGY	3	ANTH 361	*FOOD JUSTICE	4
FW 324	*FOOD FROM THE SEA	3	ANTH 477	ECOLOGICAL ANTHROPOLOGY	4
FW 325	*GLOBAL CRISES IN RESOURCE ECOLOGY	3	ANTH 481	*NATURAL RESOURCES AND COMMUNITY VALUES	3
FW 326	INTEGRATED WATERSHED MANAGEMENT	3	ANTH 482	*ANTHROPOLOGY OF INTERNATIONAL DEVELOPMENT	4
FW 419	THE NATURAL HISTORY OF WHALES AND WHALING	3	COMM 408	WORKSHOP	1-16
FW 435	*WILDLIFE IN AGRICULTURAL ECOSYSTEMS	3	COMM 440	THEORIES OF CONFLICT AND CONFLICT MANAGEMENT	3
FW 462	ECOSYSTEM SERVICES	3	COMM 442	BARGAINING AND NEGOTIATION PROCESSES	3
FW 489	EFFECTIVE COMMUNICATIONS IN FISHERIES AND WILDLIFE SCIENCE	3	ENG 482	STUDIES IN AMERICAN LITERATURE, CULTURE, AND THE ENVIRONMENT	4
GEO 306	*MINERALS, ENERGY, WATER AND THE ENVIRONMENT	3	FES 486	*PUBLIC LANDS POLICY AND MANAGEMENT	3
GEO 309	*ENVIRONMENTAL JUSTICE	3	FW 340	*MULTICULTURAL PERSPECTIVES IN NATURAL RESOURCES	3
GEOG 250	*LAND USE PLANNING FOR SUSTAINABLE COMMUNITIES	3	FW 350	*ENDANGERED SPECIES, SOCIETY AND SUSTAINABILITY	3
GEOG 300	*SUSTAINABILITY FOR THE COMMON GOOD	3	GEO 309	*ENVIRONMENTAL JUSTICE	3
GEOG 324	*ECOLOGICAL BIOGEOGRAPHY	4	GEOG 250	*LAND USE PLANNING FOR SUSTAINABLE COMMUNITIES	3
GEOG 330	*GEOGRAPHY OF INTERNATIONAL DEVELOPMENT AND GLOBALIZATION	3	HEST 310	*INTRO TO COMMUNITY ENGAGEMENT AND COMMUNITY-BASED DESIGN	3
GEOG 331	*POPULATION, CONSUMPTION, AND ENVIRONMENT	3	HORT 217	*SOCIAL IMPACTS OF SCIENCE	3
GEOG 360	GISCIENCE I: GEOGRAPHIC INFORMATION SYSTEMS AND THEORY	4	MB 330	*DISEASE AND SOCIETY	3
GEOG 430	RESILIENCE-BASED NATURAL RESOURCE MANAGEMENT	3			
GEOG 431	GLOBAL RESOURCES AND DEVELOPMENT	3			
GEOG 441	THE WORLD'S WATER	3			
GEOG 450	LAND USE IN THE AMERICAN WEST	3			

PHL 325	*SCIENTIFIC REASONING	4
PHL 390	MORAL THEORIES	3
PHL 440	*ENVIRONMENTAL ETHICS	3
PHL 443/REL 443	*WORLD VIEWS AND ENVIRONMENTAL VALUES	3
PS 331	*STATE AND LOCAL POLITICS	4
PS 370	*SCIENCE, RELIGION, AND POLITICS	4
PS 374	*SUSTAINABLE LIVING: PRACTICES AND POLICIES	4
PS 449	*TOPICS IN COMPARATIVE POLITICS	4
PS 455	*THE POLITICS OF CLIMATE CHANGE	4
PS 461	ENVIRONMENTAL POLITICAL THEORY	4
PS 475	ENVIRONMENTAL POLITICS AND POLICY	4
PS 477	INTERNATIONAL ENVIRONMENTAL POLITICS AND POLICY	4
SOC 360	*POPULATION TRENDS AND POLICY	4
SOC 480	*ENVIRONMENTAL SOCIOLOGY	4
SOC 481	*SOCIETY AND NATURAL RESOURCES	4
SUS 325	*AG AND ENVIRONMENTAL PREDICAMENTS: A CASE STUDY APPROACH	3
WGSS 440	*WOMEN AND NATURAL RESOURCES	3
WGSS 450	ECOFEMINISM	3

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Baccalaureate Core Course (BCC)

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Writing Intensive Course (WIC)

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Recommended courses

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In addition to the required credits, students must work with the Sustainability Double Degree Advisor to select elective courses relevant to their discipline and career path interests

1

Sustainability Double Degree students are required to complete a minimum of 3 Practicum credits and may complete up to 12 Practicum credits. Credits beyond the 3 credit requirement will be applied to Sustainability Electives. Before registering for a Practicum (<https://agsci.oregonstate.edu/sustainability-double-degree/practicum/>), students must get Practicum approved by their campus Sustainability Double Degree Advisor

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SUS 410 credits may be achieved by participation in an alternative break trip, international internship, and/or faculty led study tour with advisor approval

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