

ENVIRONMENTAL STUDIES MAJOR

The Gaylord Nelson Institute for Environmental Studies is one of the world's leading institutions for environmental studies and is the administrative home for the major. The Environmental Studies major offers a robust and interdisciplinary curriculum that spans all contemporary disciplines that touch upon the environment. The curriculum includes biological sciences, physical sciences, and social sciences, as well as humanities, history, health, and modern culture.

The Environmental Studies major provides unique opportunities for undergraduate students to broaden their studies through interdisciplinary coursework related to the environment. **The major must always be completed in tandem with a second major.** This requirement is unique to the Environmental Studies major and allows undergraduates the opportunity to both broaden and deepen the focus of their other major with a perspective on the environment that spans a wide range of topics and involves varying depths of application.

The major includes experiential learning opportunities via the capstone course and the field requirement and encourages global interaction through study or internships abroad. With numerous travel abroad possibilities and ongoing access to a large selection of extracurricular events, graduates have countless combinations available to them. The outcome is a solid academic foundation in the study of the environment and access to a network of multidisciplinary problem-solving colleagues.

In today's world, the program prepares students to address modern challenges using interdisciplinary problem-solving approaches, applying both an understanding of, and practical experience beyond, a single academic discipline. Employers purposefully seek individuals with interdisciplinary and international preparation, and environmental studies students are ready to meet that need.

The Nelson Institute also offers two undergraduate certificates:

Environmental Studies Certificate (<https://guide.wisc.edu/undergraduate/environmental-studies/environmental-studies/environmental-studies-certificate/>)

Sustainability Certificate (<https://guide.wisc.edu/undergraduate/environmental-studies/environmental-studies/sustainability-certificate/>)

HOW TO GET IN

HOW TO GET IN DECLARING THE MAJOR

Students interested in declaring the Environmental Studies major should request a major declaration appointment. Information about declaring the major can be found at undergraduate advising (<https://nelson.wisc.edu/undergraduate/advising.php>).

Students who earn the Environmental Studies major may not also earn the Environmental Studies Certificate.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<https://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the Guide.

General Education

- Breadth—Humanities/Literature/Arts: 6 credits
- Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth—Social Studies: 3 credits
- Communication Part A & Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A & Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

SCHOOL/COLLEGE REQUIREMENTS

The Environmental Studies major is always paired with another major. Please refer to the School/College degree requirements of the other major to learn about degree requirements or consult an advisor.

REQUIREMENTS FOR THE MAJOR

The environmental studies major provides students with an academically rigorous course sequence that encompasses introductory through advanced understandings of the interdisciplinary field of environmental studies. Students must have a declared primary major, and are allowed to apply a portion of course work from that major for the environmental studies major, making it possible to complete their degree within four years.

- **30 credits in the major as defined below.**
- Declare and complete a primary major. **Students must have a primary major declared before reaching senior standing (86 credits) or the environmental studies major may be canceled.**
- At least 15 credits taken for the environmental studies major must be distinct, and not also meeting minimum requirements in another major.
- Students outside the College of Letters & Science may have to meet additional overlap requirements.

FOUNDATION (12 CREDITS)

One course from each of the following four areas. Courses applied to Foundation cannot also be used in Theme or Capstone.

Environmental Humanities (3 credits)

Code	Title	Credits
ENVIR ST 113	Environmental Studies: Environmental Humanities	3
ENVIR ST/HIST SCI/ HISTORY 125	Green Screen: Environmental Perspectives through Film	3
ENVIR ST/ART HIST/ GEOG/HISTORY/ LAND ARC 239	Making the American Landscape	3-4
ENVIR ST/ RELIG ST 270	The Environment: Religion & Ethics	3-4
HISTORY/ENVIR ST/ GEOG 460	American Environmental History	4
ENVIR ST/ HISTORY 465	Global Environmental History	3-4
ENVIR ST/ CLASSICS 488	Greeks, Romans and the Natural Environment	3

Environmental Social Science (3 credits)

Code	Title	Credits
ENVIR ST 112	Environmental Studies: Social Science Perspectives	3
ENVIR ST/ GEOG 139	Global Environmental Issues	3
ENVIR ST/A A E 244	The Environment and the Global Economy	4
ENVIR ST/ GEOG 339	Environmental Conservation	4
C&E SOC/SOC 140	Introduction to Community and Environmental Sociology	4
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society	3

Environmental Physical Science (3 credits)

Code	Title	Credits
ENVIR ST/ GEOSCI 106	Environmental Geology	3
ENVIR ST/ GEOG 120	Introduction to the Earth System	3
ENVIR ST/ILS 126	Principles of Environmental Science	4
ENVIR ST/GEOG 127	Physical Systems of the Environment	4
ENVIR ST/GEOG/ SOIL SCI 230	Soil: Ecosystem and Resource	3
ENVIR ST/ILS 255	Introduction to Sustainability Science	4
ENVIR ST/ ATM OCN/ GEOG 332	Global Warming: Science and Impacts	3
ENVIR ST/ ATM OCN/GEOG/ GEOSCI 335	Climatic Environments of the Past	3
ATM OCN 100	Weather and Climate	3

ATM OCN 101	Weather and Climate	4
ATM OCN/ SOIL SCI 132	Earth's Water: Natural Science and Human Use	3
SOIL SCI 301	General Soil Science	3
PHYSICS 115	Energy and Climate	3

Environmental Ecology (3 credits)

Code	Title	Credits
ENVIR ST 251	Ecology and the Global Environment	3
ENVIR ST/BOTANY/ ZOOLOGY 260	Introductory Ecology	3
ENVIR ST 413	Preserving Nature	3
BOTANY 240	Plants and Humans	3
BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology	4
GEOSCI 110	Evolution and Extinction	4
F&W ECOL 401	Physiological Animal Ecology	3
F&W ECOL 550	Forest Ecology	3

THEME (15 CREDITS)

Five courses and 15 credits from any of the areas below. Courses may be concentrated in one area or distributed across multiple areas. Courses applied to the thematic areas cannot also be used in Foundation or Capstone.

Biodiversity

Code	Title	Credits
ENVIR ST/ F&W ECOL 100	Forests of the World	3
ENVIR ST/ ENTOM 201	Insects and Human Culture—a Survey Course in Entomology	3
ENVIR ST 251	Ecology and the Global Environment	3
ENVIR ST/BOTANY/ ZOOLOGY 260	Introductory Ecology	3
ENVIR ST/ F&W ECOL/ ZOOLOGY 360	Extinction of Species	3
ENVIR ST/ LAND ARC 361	Wetlands Ecology	3
ENVIR ST 375	Field Ecology Workshop	3
ENVIR ST 413	Preserving Nature	3
ENVIR ST/C&E SOC/ GEOG 434	People, Wildlife and Landscapes	3
ENVIR ST/BOTANY/ F&W ECOL/ ZOOLOGY 516	Conservation Biology	3
ENVIR ST 613	Reproducibility Crises and Open Science in Environmental Studies	3
AGROECOL 370	Grassland Ecology	3
AN SCI/F&W ECOL/ ZOOLOGY 520	Ornithology	3
AN SCI/F&W ECOL/ ZOOLOGY 521	Birds of Southern Wisconsin	3
ANTHRO/BOTANY/ ZOOLOGY 410	Evolutionary Biology	3

ATM OCN/ PLANTSCI 532	Environmental Biophysics	3
BIOCORE 181	Becoming a Scientist: Doing Biology Research	2
BOTANY 240	Plants and Humans	3
BOTANY/GEOG 338	Environmental Biogeography	3
BOTANY 401	Vascular Flora of Wisconsin	4
BOTANY/ F&W ECOL 402	Dendrology: Woody Plant Identification and Ecology	3
BOTANY 422	Plant Geography	3
BOTANY/ ZOOLOGY 450	Midwestern Ecological Issues: A Case Study Approach	2
BOTANY/ F&W ECOL 455	The Vegetation of Wisconsin	4
BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology	4
BOTANY/ F&W ECOL/ ZOOLOGY 672	Historical Ecology	2
ENTOM/ ZOOLOGY 302	Introduction to Entomology	4
ENTOM 490	Biodiversity and Global Change	3
F&W ECOL 110	Living with Wildlife - Animals, Habitats, and Human Interactions	3
F&W ECOL 401	Physiological Animal Ecology	3
F&W ECOL 448	Disturbance Ecology	3
F&W ECOL/ SURG SCI 548	Diseases of Wildlife	3
F&W ECOL 550	Forest Ecology	3
F&W ECOL 551	Forest Ecology Lab	1
F&W ECOL/ ZOOLOGY 660	Climate Change Ecology	3
GEOG 538	The Humid Tropics: Ecology, Subsistence, and Development	4
GEOSCI 110	Evolution and Extinction	4

Climate

Code	Title	Credits
ENVIR ST/ ATM OCN/ GEOSCI 102	Climate and Climate Change	3
ENVIR ST/ ATM OCN 171	Global Change: Atmospheric Issues and Problems	2-3
ENVIR ST/ ATM OCN/ GEOG 322	Polar Regions and Their Importance in the Global Environment	3
ENVIR ST/ ATM OCN/ GEOG 332	Global Warming: Science and Impacts	3
ENVIR ST/ ATM OCN/GEOG/ GEOSCI 335	Climatic Environments of the Past	3
ENVIR ST 349	Climate Change Governance	3
ENVIR ST/ ATM OCN 355	Introduction to Air Quality	3

ENVIR ST/ ATM OCN 520	Bioclimatology	3
A A E 246	Climate Change Economics and Policy	3
ATM OCN 100	Weather and Climate	3
ATM OCN 101	Weather and Climate	4
ATM OCN 425	Global Climate Processes	3
ATM OCN 522	Tropical Meteorology	3
CIV ENGR 525	Case Studies Exploring Infrastructure Sustainability and Climate Change	3
ED POL 320	Climate Change, Sustainability, and Education	3
F&W ECOL/ ZOOLOGY 660	Climate Change Ecology	3
GEOG/GEOSCI 420	Glacial and Pleistocene Geology	3
GEOG 523	Advanced Paleoecology: Species Responses to Past Environmental Change	3
SOIL SCI 211	Soils and Climate Change	2

Energy

Code	Title	Credits
ENVIR ST/BSE 367	Renewable Energy Systems	3
ENVIR ST/ GEOSCI 411	Energy Resources	3
ENVIR ST/A A E/ CIV ENGR/ URB R PL 561	Energy Markets	3
ENVIR ST/A A E/ ECON/URB R PL 671	Energy Economics	3
A A E/ECON 371	Energy, Resources and Economics	3
BSE 460	Biorefining: Energy and Products from Renewable Resources	3
CIV ENGR/ G L E 535	Wind Energy Balance-of-Plant Design	3
E C E 356	Electric Power Processing for Alternative Energy Systems	3
M E 461	Thermal Systems Modeling	3
M E/N E 565	Power Plant Technology	3
N E 571	Economic and Environmental Aspects of Nuclear Energy	3
PHYSICS 115	Energy and Climate	3

Food and Agriculture

Code	Title	Credits
ENVIR ST/ AGROECOL/ C&E SOC/ ENTOM 103	Agroecology: An Introduction to the Ecology of Food and Agriculture	3
ENVIR ST/ GEOG 309	People, Land and Food: Comparative Study of Agriculture Systems	3
A A E/C&E SOC/ SOC 340	Issues in Food Systems	3-4
A A E/ NUTR SCI 350	World Hunger and Malnutrition	3

A A E/PL PATH/ PLANTSCI 367	Introduction to Organic Agriculture: Production, Markets, and Policy	3
AGROECOL 303	Agroecological Systems: Working Towards Sustainability	3
AGROECOL 377	Global Food Production and Health	3
AN SCI 210	You and Your Food: Farm to Table	2
C&E SOC/SOC 222	Food, Culture, and Society	3
C&E SOC/SOC 650	Sociology of Agriculture	3
CNSR SCI 360	Sustainable and Socially Just Consumption	3
FOLKLORE 439	Foodways	3
FOOD SCI 120	Science of Food	3
GEN&WS 472	Food for Thought: An Intersectional Approach	3
INTER-AG 117	GreenHouse Roots Seminar	1
MED HIST/ PHILOS 344	Food Ethics	3
NUTR SCI 132	Nutrition Today	3
PLANTSCI 310	Plant Science and Technology in Cropping Systems	4
PLANTSCI 300	Cropping Systems	3
PLANTSCI 370	World Vegetable Crops	3
PLANTSCI 376	Tropical Horticultural Systems	2
PLANTSCI 380	Indigenous Foodways: Food and Seed Sovereignty	2
SOIL SCI 211	Soils and Climate Change	2

Health

Code	Title	Credits
ENVIR ST/ ENTOM 205	Our Planet, Our Health	3
ENVIR ST/ HIST SCI 213	Global Environmental Health: An Interdisciplinary Introduction	3
ENVIR ST/ POP HLTH 471	Introduction to Environmental Health	3
ENVIR ST/ POP HLTH 502	Air Pollution and Human Health	3
A A E/ NUTR SCI 350	World Hunger and Malnutrition	3
C&E SOC/ POP HLTH 370	Introduction to Public Health	3
CIV ENGR 422	Elements of Public Health Engineering	3
CIV ENGR 423	Air Pollution Effects, Measurement and Control	3
CIV ENGR/ M&ENVTOX/ SOIL SCI 631	Toxicants in the Environment: Sources, Distribution, Fate, & Effects	3
GEN&WS/ INTL ST 535	Women's Global Health and Human Rights	3
HIST SCI/MED HIST/ POP HLTH 553	International Health and Global Society	3
SOIL SCI 430	Soil Pollution and Human Health	3

History, Culture, Society

Code	Title	Credits
ENVIR ST 112	Environmental Studies: Social Science Perspectives	3
ENVIR ST 113	Environmental Studies: Environmental Humanities	3
ENVIR ST/HIST SCI/ HISTORY 125	Green Screen: Environmental Perspectives through Film	3
ENVIR ST/ILS 126	Principles of Environmental Science	4
ENVIR ST/ GEOG 139	Global Environmental Issues	3
ENVIR ST/ENGL 153	Literature and the Environment	3
ENVIR ST/GNS 210	Cultures of Sustainability: Central, Eastern, and Northern Europe	3
ENVIR ST/ART HIST/ GEOG/HISTORY/ LAND ARC 239	Making the American Landscape	3-4
ENVIR ST 245		
ENVIR ST/ RELIG ST 270	The Environment: Religion & Ethics	3-4
ENVIR ST/ ENGL 305	Rhetoric, Science, and Public Engagement	3
ENVIR ST/ AMER IND 306	Indigenous Peoples and the Environment	3
ENVIR ST 307	Literature of the Environment: Speaking for Nature	3
ENVIR ST 308	Outdoors For All: Inequities in Environmentalism	3
ENVIR ST 317	Community Environmental Scholars Program Seminar	1
ENVIR ST/ HISTORY 328	Environmental History of Europe	3
ENVIR ST/ GEOG 337	Nature, Power and Society	3
ENVIR ST/ GEOG 339	Environmental Conservation	4
ENVIR ST/ AMER IND 341	Indigenous Environmental Communicators	3
ENVIR ST/ HISTORY 369	Thinking through History with Animals	3-4
ENVIR ST/HISTORY/ LEGAL ST 430	Law and Environment: Historical and Contemporary Perspectives	3
ENVIR ST/ PHILOS 441	Environmental Ethics	3-4
ENVIR ST/ SPANISH 445	Culture and the Environment in the Luso-Hispanic World	3
ENVIR ST/GEOG/ HISTORY 460	American Environmental History	4
ENVIR ST/ HISTORY 465	Global Environmental History	3-4
ENVIR ST/ CLASSICS 488	Greeks, Romans and the Natural Environment	3
ENVIR ST/ ENGL 533	Topic in Literature and the Environment	3
ENVIR ST/ GEOG 537	Culture and Environment	4

ENVIR ST/ GEOG 557	Development and Environment in Southeast Asia	3
AGROECOL/ HIST SCI 301	(Horti)Cultural Roots: Human Histories of Plants and Science	4
AMER IND/ HISTORY 190	Introduction to American Indian History	3-4
AMER IND/ GEOG 410	Critical Indigenous Ecological Knowledges	3
ANTHRO 477	Anthropology, Environment, and Development	3
BOTANY/ F&W ECOL/ ZOOLOGY 672	Historical Ecology	2
C&E SOC/SOC 140	Introduction to Community and Environmental Sociology	4
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society	3
CHICLA/ HISTORY 151	The North American West to 1850	3-4
CLASSICS 103	Nature, Race, and Human Difference	3
ED POL 320	Climate Change, Sustainability, and Education	3
F&W ECOL/ ZOOLOGY 335	Human/Animal Relationships: Biological and Philosophical Issues	3
LAND ARC 360	Earth Partnership Restoration Education: Indigenous Arts & Sciences	1
PLANTSCI 380	Indigenous Foodways: Food and Seed Sovereignty	2
SPANISH 455	Contemporary Mayas: A Culture of Nature	3

Justice

Code	Title	Credits
ENVIR ST 112	Environmental Studies: Social Science Perspectives	3
ENVIR ST 113	Environmental Studies: Environmental Humanities	3
ENVIR ST/ RELIG ST 270	The Environment: Religion & Ethics	3-4
ENVIR ST/ AMER IND 306	Indigenous Peoples and the Environment	3
ENVIR ST 308	Outdoors For All: Inequities in Environmentalism	3
ENVIR ST/ GEOG 309	People, Land and Food: Comparative Study of Agriculture Systems	3
ENVIR ST 317	Community Environmental Scholars Program Seminar	1
ENVIR ST/ GEOG 337	Nature, Power and Society	3
ENVIR ST 349	Climate Change Governance	3
ENVIR ST 413	Preserving Nature	3
ENVIR ST/HISTORY/ LEGAL ST 430	Law and Environment: Historical and Contemporary Perspectives	3

ENVIR ST/ PHILOS 441	Environmental Ethics	3-4
ENVIR ST/ GEOG 534	Environmental Governance: Markets, States and Nature	3
ENVIR ST/C&E SOC/ SOC 540	Sociology of International Development, Environment, and Sustainability	3
A A E/INTL ST 373	Globalization, Poverty and Development	3
A A E/ECON 474	Economic Problems of Developing Areas	3
AGROECOL/ HIST SCI 301	(Horti)Cultural Roots: Human Histories of Plants and Science	4
AMER IND/ HISTORY 190	Introduction to American Indian History	3-4
AMER IND/ GEOG 410	Critical Indigenous Ecological Knowledges	3
ANTHRO 477	Anthropology, Environment, and Development	3
C&E SOC/SOC 541	Environmental Stewardship and Social Justice	3
C&E SOC/SOC 573	Community Organization and Change	3
CHICLA/ CURRIC 354	Race and Language in STEM and Environmental Education	3
CIV ENGR/ M&ENVTOX/ SOIL SCI 631	Toxicants in the Environment: Sources, Distribution, Fate, & Effects	3
CNSR SCI 360	Sustainable and Socially Just Consumption	3
ECON 370	Economics of Poverty and Inequality	3
F&W ECOL/ ZOOLOGY 335	Human/Animal Relationships: Biological and Philosophical Issues	3
GEN&WS 472	Food for Thought: An Intersectional Approach	3
LAND ARC 360	Earth Partnership Restoration Education: Indigenous Arts & Sciences	1

Land Use

Code	Title	Credits
ENVIR ST/ GEOSCI 106	Environmental Geology	3
ENVIR ST/ GEOG 120	Introduction to the Earth System	3
ENVIR ST/GEOG 127	Physical Systems of the Environment	4
ENVIR ST/GEOG/ SOIL SCI 230	Soil: Ecosystem and Resource	3
ENVIR ST/ GEOG 309	People, Land and Food: Comparative Study of Agriculture Systems	3
ENVIR ST/ SOIL SCI 324	Soils and Environmental Quality	3
ENVIR ST/ GEOG 333	Green Urbanism	3

ENVIR ST/ GEOG 337	Nature, Power and Society	3	LAND ARC/ URB R PL 463	Evolution of American Planning	3
ENVIR ST/ GEOG 339	Environmental Conservation	4	LAND ARC 511	Geodesign Methods and Applications	3
ENVIR ST/C&E SOC/ GEOG 434	People, Wildlife and Landscapes	3	LAND ARC 668	Restoration Ecology	3
ENVIR ST/ ECON/POLI SCI/ URB R PL 449	Government and Natural Resources	3-4	LAND ARC 677	Cultural Resource Preservation and Landscape History	3
ENVIR ST/GEOG/ HISTORY 460	American Environmental History	4	SOIL SCI 301	General Soil Science	3
ENVIR ST/ F&W ECOL 515	Natural Resources Policy	3	SOIL SCI 302	Meet Your Soil: Soil Analysis and Interpretation Laboratory	1
ENVIR ST/BOTANY/ F&W ECOL/ ZOOLOGY 516	Conservation Biology	3	SOIL SCI 430	Soil Pollution and Human Health	3
ENVIR ST/ GEOG 537	Culture and Environment	4	URB R PL 601	Site Planning	3
ENVIR ST/ GEOG 557	Development and Environment in Southeast Asia	3	Policy		
ENVIR ST/ SOIL SCI 575	Assessment of Environmental Impact	3	Code	Title	Credits
ENVIR ST/ LAND ARC 581	Prescribed Fire: Ecology and Implementation	3	ENVIR ST/A A E 244	The Environment and the Global Economy	4
ENVIR ST/ LAND ARC/ SOIL SCI 695	Applications of Geographic Information Systems in Natural Resources	3	ENVIR ST/ ENGL 305	Rhetoric, Science, and Public Engagement	3
A A E/ECON/ REAL EST/ URB R PL 306	The Real Estate Process	3	ENVIR ST/ GEOG 309	People, Land and Food: Comparative Study of Agriculture Systems	3
BOTANY/GEOG 338	Environmental Biogeography	3	ENVIR ST/ GEOG 339	Environmental Conservation	4
CNSR SCI 360	Sustainable and Socially Just Consumption	3	ENVIR ST/A A E/ ECON 343	Environmental Economics	3-4
ECON/REAL EST/ URB R PL 420	Urban and Regional Economics	3	ENVIR ST/ AMER IND/ GEOG 345	Caring for Nature in Native North America	3
F&W ECOL 410	Principles of Silviculture	3	ENVIR ST 349	Climate Change Governance	3
F&W ECOL/ SOIL SCI 451	Environmental Biogeochemistry	3	ENVIR ST/C&E SOC/ CURRIC 405	Education for Sustainable Communities	3
GEOG/ URB R PL 305	Introduction to the City	3-4	ENVIR ST 417	Sustainability Science, Technology and Policy	1
GEOG 344	Changing Landscapes of the American West	3	ENVIR ST/HISTORY/ LEGAL ST 430	Law and Environment: Historical and Contemporary Perspectives	3
GEOG/ URB R PL 505	Urban Spatial Patterns and Theories	3	ENVIR ST/ GEOG 439	US Environmental Policy and Regulation	3-4
GEOG 538	The Humid Tropics: Ecology, Subsistence, and Development	4	ENVIR ST/ ECON/POLI SCI/ URB R PL 449	Government and Natural Resources	3-4
LAND ARC/ AMER IND 106	Earth Partnership Indigenous Arts and Sciences	3	ENVIR ST/ F&W ECOL 515	Natural Resources Policy	3
LAND ARC 211	Shaping the Built Environment	3	ENVIR ST/ PHILOS 523	Philosophical Problems of the Biological Sciences	3
LAND ARC 311	Introduction to Design Frameworks and Spatial Technologies	2	ENVIR ST/ GEOG 534	Environmental Governance: Markets, States and Nature	3
LAND ARC 373	Mindfulness in Restorative Environments	3	ENVIR ST/C&E SOC/ SOC 540	Sociology of International Development, Environment, and Sustainability	3
LAND ARC 380	Plants for Ecological Design I	2	ENVIR ST/ GEOG 557	Development and Environment in Southeast Asia	3
LAND ARC 381	Plants for Ecological Design II	1	ENVIR ST 613	Reproducibility Crises and Open Science in Environmental Studies	3
			A A E/INTL ST 373	Globalization, Poverty and Development	3

A A E/ F&W ECOL 430	Decision Methods for Natural Resource Managers	3
A A E/ECON 474	Economic Problems of Developing Areas	3
A A E/ECON/ F&W ECOL 531	Natural Resource Economics	3
C&E SOC/SOC 541	Environmental Stewardship and Social Justice	3
C&E SOC/SOC 573	Community Organization and Change	3
CHICLA/ CURRIC 354	Race and Language in STEM and Environmental Education	3
CIV ENGR 494	Civil and Environmental Engineering Decision Making	3
CIV ENGR 522	Hazardous Waste Management	3
CIV ENGR/ M&ENVTOX/ SOIL SCI 631	Toxicants in the Environment: Sources, Distribution, Fate, & Effects	3
ECON 370	Economics of Poverty and Inequality	3
F&W ECOL 410	Principles of Silviculture	3
M H R 310	Challenges & Solutions in Business Sustainability	3
OTM 370	Sustainable Approaches to System Improvement	3
POLI SCI 272	Introduction to Public Policy	3-4
PUB AFFR 340	Intermediate Evidence-Based Policymaking and Communication	3
PUB AFFR 366	U.S. Environmental Politics and Public Policy	3
R M I 650	Sustainability, Environmental and Social Risk Management	2-3
REAL EST 651	Green - Sustainable Development	3
URB R PL 215	Welcome to Your Urban Future	3
URB R PL 551	Climate Action Planning: Sustainable Transportation	3

Geospatial Analysis

Code	Title	Credits
ENVIR ST/ F&W ECOL/G L E/ GEOG/GEOSCI/ LAND ARC 371	Introduction to Environmental Remote Sensing	3
ENVIR ST/ CIV ENGR/ GEOG 377	An Introduction to Geographic Information Systems	4
ENVIR ST/ CIV ENGR/G L E/ GEOSCI 444	Practical Applications of GPS Surveying	2
ENVIR ST/GEOG/ LAND ARC/ URB R PL 532	Applications of Geographic Information Systems in Planning	3
ENVIR ST/ LAND ARC/ SOIL SCI 695	Applications of Geographic Information Systems in Natural Resources	3
F&W ECOL 395	Data and GIS Tools for Ecology	3
GEOG 379	Geospatial Technologies: Drones, Sensors, and Applications	3

GEOG/ URB R PL 505	Urban Spatial Patterns and Theories	3
LAND ARC 311	Introduction to Design Frameworks and Spatial Technologies	2
LAND ARC 511	Geodesign Methods and Applications	3

Sustainability

Code	Title	Credits
ENVIR ST/ILS 126	Principles of Environmental Science	4
ENVIR ST 215	Sustainability	3
ENVIR ST/A A E 244	The Environment and the Global Economy	4
ENVIR ST/ILS 255	Introduction to Sustainability Science	4
ENVIR ST/ AMER IND 306	Indigenous Peoples and the Environment	3
ENVIR ST 326	Sustainability Tools: Systems Thinking & Life Cycle Assessment	3
ENVIR ST/ GEOG 333	Green Urbanism	3
ENVIR ST 365	Systems Thinking	3
ENVIR ST/BSE 367	Renewable Energy Systems	3
ENVIR ST/C&E SOC/ CURRIC 405	Education for Sustainable Communities	3
ENVIR ST 417	Sustainability Science, Technology and Policy	1
ENVIR ST/C&E SOC/ SOC 540	Sociology of International Development, Environment, and Sustainability	3
A A E/INTL ST 373	Globalization, Poverty and Development	3
A A E/ECON 474	Economic Problems of Developing Areas	3
AGROECOL 377	Global Food Production and Health	3
AN SCI/DY SCI/ FOOD SCI/ SOIL SCI 472	Animal Agriculture and Global Sustainable Development	1
CIV ENGR 121	Sustainability Engineering for Non- Engineers	3
CIV ENGR/G L E 421	Environmental Sustainability Engineering	3
CIV ENGR 495	Sustainable Building and Materials	3
CIV ENGR 525	Case Studies Exploring Infrastructure Sustainability and Climate Change	3
CNSR SCI 360	Sustainable and Socially Just Consumption	3
DY SCI 471	Food Production Systems and Sustainability	3
ED POL 320	Climate Change, Sustainability, and Education	3
LAND ARC 211	Shaping the Built Environment	3
LAND ARC 563	Designing Sustainable and Resilient Regions	4
M H R 310	Challenges & Solutions in Business Sustainability	3

OTM 370	Sustainable Approaches to System Improvement	3
PL PATH/ PLANTSCI 261	Sustainable Turfgrass Use and Management	2
URB R PL 215	Welcome to Your Urban Future	3
URB R PL 551	Climate Action Planning: Sustainable Transportation	3

Water

Code	Title	Credits
ENVIR ST/ ZOOLOGY 315	Limnology-Conservation of Aquatic Resources	2
ENVIR ST/ LAND ARC 361	Wetlands Ecology	3
ENVIR ST/ ZOOLOGY 510	Ecology of Fishes	3
ENVIR ST/ ZOOLOGY 511	Ecology of Fishes Lab	2
ATM OCN/ GEOSCI 105	Survey of Oceanography	3-4
ATM OCN/ SOIL SCI 132	Earth's Water: Natural Science and Human Use	3
BSE 473	Water Management Systems	3
CIV ENGR 311	Hydroscience	3
CIV ENGR 320	Environmental Engineering	3
CIV ENGR 322	Environmental Engineering Processes	3
G L E/GEOSCI 627	Hydrogeology	3-4
G L E/GEOSCI 629	Contaminant Hydrogeology	3
ZOOLOGY 115	Freshwater: Past, Present, and Future	3
ZOOLOGY 316	Laboratory for Limnology-Conservation of Aquatic Resources	2-3

Multi-thematic

Code	Title	Credits
ENVIR ST/ SOIL SCI 101	Forum on the Environment	1-2
ENVIR ST 202	Careers in the Environment	2
ENVIR ST 203	Special Topics in Environmental Studies	1-3
ENVIR ST 398	Independent Study: Sustainability Community Engagement	1
ENVIR ST 400	Special Topics in the Environment: Biological Aspects of Envir St	1-4
ENVIR ST 401	Special Topics: Environmental Perspectives in the Physical Sciences	1-4
ENVIR ST 402	Special Topics: Social Perspectives in Environmental Studies	1-4
ENVIR ST 403	Special Topics in Environmental Studies	1-3
ENVIR ST 404	Special Topics in Environmental Humanities	1-3

BEYOND THE CLASSROOM EXPERIENCE

The Beyond the Classroom experience in the Environmental Studies major can be met in one of the following ways:

- A course from the list below. Courses used to meet the Beyond the Classroom experience requirement may also be used in other areas of the curriculum.
- Participation in an environmental study abroad program where 50% or more of the contact hours are in an out-of-doors situation (see your advisor)
- Participation in an environmental internship or similar experience where 50% or more of the contact hours are in an out-of-doors situation (field form summary **must** be submitted)

Beyond the Classroom experiences are expected to include one or more of the following: data gathering, reflective out of-classroom experience, practical application, performance/creation related to environment, outdoor experiences, community engagement/service. The Beyond the Classroom experience gives students practice in an outward-facing application of environmental studies and sustainability.

Code	Title	Credits
ENVIR ST/ILS 126	Principles of Environmental Science	4
ENVIR ST/GEOG 127	Physical Systems of the Environment	4
ENVIR ST/ILS 255	Introduction to Sustainability Science	4
ENVIR ST/ LAND ARC 361	Wetlands Ecology	3
ENVIR ST 375	Field Ecology Workshop	3
ENVIR ST 398	Independent Study: Sustainability Community Engagement	1
ENVIR ST/ CIV ENGR/G L E/ GEOSCI 444	Practical Applications of GPS Surveying	2
ENVIR ST/ ZOOLOGY 511	Ecology of Fishes Lab	2
ENVIR ST/ LAND ARC 581	Prescribed Fire: Ecology and Implementation	3
BOTANY/ F&W ECOL 402	Dendrology: Woody Plant Identification and Ecology	3
BOTANY/ F&W ECOL 455	The Vegetation of Wisconsin	4
BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology	4
F&W ECOL 551	Forest Ecology Lab	1
LAND ARC/ AMER IND 106	Earth Partnership Indigenous Arts and Sciences	3
LAND ARC 360	Earth Partnership Restoration Education: Indigenous Arts & Sciences	1
LAND ARC 363	Earth Partnership: Restoration Education for Equity and Resilience	3
LAND ARC 373	Mindfulness in Restorative Environments	3
LAND ARC 668	Restoration Ecology	3

SOIL SCI 302	Meet Your Soil: Soil Analysis and Interpretation Laboratory	1
ZOOLOGY 316	Laboratory for Limnology-Conservation of Aquatic Resources	2-3

CAPSTONE REQUIREMENT (3 CREDITS)

3 credits from:

Code	Title	Credits
ENVIR ST 600	Environmental Studies Capstone	3

RESIDENCE & QUALITY OF WORK IN THE MAJOR

- 2.000 GPA in all ENVIR ST courses and courses in the major
- 2.000 GPA on 15 upper-level major credits, taken in Residence. Intermediate and Advanced level courses in the major are considered upper level.
- 15 credits in ENVIR ST or in the major, taken on campus (at UW–Madison)

HONORS IN THE MAJOR

Honors in the Major is not available in Environmental Studies.

LEARNING OUTCOMES

LEARNING OUTCOMES

1. Explain the social and historical processes that impact current environments and sustainability issues. Interpret the meanings, values, and systems that are created, shaped, and revealed as humans interact with and modify the environments they inhabit.
2. Explain systemic and ecological processes and fundamental principles of environmental sciences relating to humanity's key environmental challenges of the past, present, and future.
3. Analyze and respond to questions in environment and sustainability by applying interdisciplinary approaches that integrate multiple perspectives, including those from a coordinate major.
4. Recognize through critical thinking a diversity of viewpoints, ethical commitments, and disciplinary approaches to environmental and sustainability concerns across various scales from the local to the global.
5. Demonstrate excellent reading, writing, communication, and research skills, both individually and in interdisciplinary teams.

FOUR-YEAR PLAN

FOUR-YEAR PLAN

This Four-Year Plan is only one way a student may complete an L&S degree with this major. Many factors can affect student degree planning, including placement scores, credit for transferred courses, credits earned by examination, and individual scholarly interests. In addition, many students have commitments (e.g., athletics, honors, research, student organizations, study abroad, work and volunteer experiences) that necessitate they adjust their plans accordingly. Informed students engage in their own unique Wisconsin Experience by consulting their academic

advisors, Guide, DARS, and Course Search & Enroll for assistance making and adjusting their plan.

Freshman

Fall	Credits Spring	Credits
Coordinate major course	3 Coordinate major course	3
Quantitative Reasoning A	3 ENVIR ST Foundation course (e.g. ENVIR ST 126)	3
Foreign Language	4 Communication A (complete during your first year)	3
ENVIR ST Foundation course (e.g. ENVIR ST 112)	3-4 Foreign Language/Elective	4
	Elective	3
	14	16

Sophomore

Fall	Credits Spring	Credits
Quantitative Reasoning B	3-5 Communication B	4
ENVIR ST 306 (counts for Ethnic Studies)	3 INTER-LS 210: Taking Initiative	2
ENVIR ST Breadth	3-4 ENVIR ST Breadth	3
Coordinate major course	3-4 Coordinate major course	3
	Elective	3
	15	15

Junior

Fall	Credits Spring	Credits
Coordinate major course	3 Coordinate major course	3
ENVIR ST theme	3-4 Coordinate major course	3
ENVIR ST theme	3-4 ENVIR ST theme	3-4
L&S Breadth/Elective	3 ENVIR ST theme	3-4
L&S Breadth/Elective	3 L&S Breadth/Elective	3
	15	15

Senior

Fall	Credits Spring	Credits
Coordinate major course	3 Coordinate major course	3
Coordinate major course	3 ENVIR ST Capstone or remaining theme	3-4
ENVIR ST Capstone or remaining theme	3 Elective	3
Elective	3 Elective	3
Elective	3 Elective	3
	15	15

Total Credits 120

ADVISING AND CAREERS

ADVISING AND CAREERS

The Environmental Studies major (<https://nelson.wisc.edu/undergraduate/environmental-studies-major/>) offers unique opportunities for undergraduate students to broaden their studies through interdisciplinary coursework related to the environment. See

undergraduate advising (<https://nelson.wisc.edu/undergraduate/advising/>) for more information about declaring the major or certificate.

Environmental Studies students are represented in majors all across campus and in most undergraduate schools and colleges. Environmental studies majors should utilize the career office for their home school as appropriate.

SUCCESSWORKS

SuccessWorks (<https://successworks.wisc.edu/>) at the College of Letters & Science helps you turn the academic skills learned in your classes into a fulfilling life, guiding you every step of the way to securing jobs, internships, or admission to graduate school.

Through one-on-one career advising, events, and resources, you can explore career options, build valuable internship and research experience, and connect with supportive alumni and employers who open doors of opportunity.

- What you can do with your major (<https://successworks.wisc.edu/what-you-can-do-with-your-major/>) (Major Skills & Outcomes Sheets)
- Make a career advising appointment (<https://successworks.wisc.edu/make-an-appointment/>)
- Learn about internships and internship funding (<https://successworks.wisc.edu/finding-a-job-or-internship/>)
- Try “Jobs, Internships, & How to Get Them,” (<https://successworks.wisc.edu/canvas/>) an interactive guide in Canvas for enrolled UW–Madison students