# Environmental Studies (BA/BS)

The environmental studies major provides students with opportunities to work alongside world-class scholars and researchers, develop concrete skills and analytical abilities, and gain hands-on experience solving environmental issues. The environmental studies major emphasizes an interdisciplinary approach to environmental topics that combines the natural sciences, social sciences, policy studies, sustainable design, and the humanities. The curriculum includes environmentally-related courses taught by more than 100 participating faculty from 30 campus programs and departments.

The environmental studies major is flexible, allowing you to tailor coursework with a focal point of your choice to meet specific educational and career goals. We prioritizes practical learning experiences where you will link theory to practice and build transferable skills through internships, research, and community involvement. Our Environmental Leadership Program and a robust internship program offer capstone experiences for undergraduate students that provide training in teamwork, time management, communication, and problem solving skills that are increasingly valued in all careers.

## Program's Admission Requirements

Please visit the program's website (https://cas.uoregon.edu/envs/apply/).

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Articulate the contributions from the social sciences, natural sciences, and humanities in understanding environmental issues.
- Articulate major root causes of environmental problems and avenues for addressing them.
- Discuss several key concepts within the field of environmental studies (e.g. sustainability, environmental justice, climate change, humans varied ways of understanding and representing nature, the relationship between nature and culture), drawing on interdisciplinary perspectives.
- Demonstrate critical thinking and communication skills, including the ability to: a) Critically analyze environmental information, data and problems; b) Interpret a variety of environmental writings; c) Synthesize diverse information sources; d) Communicate effectively through written and oral communication.

## Environmental Studies Major Requirements

The Environmental Studies major is customizable, allowing students to tailor their coursework to meet specific education and career goals. Students can concentrate on focal areas of their choosing and select from a variety of courses across disciplines, which provides students with a robust, well-rounded educational experience. The major requires a minimum of 92 credits including 56 upper-division credits. Except for ENVS 401-409, all courses applied to the major or minor must be graded, and a C- or better must be earned in all graded courses. As many as four upper-division courses may be used to fulfill the requirements of another major.Major requirements sheets containing detailed information about specific courses are available on the Environmental Studies website, in the Environmental Studies office, or by visiting an advisor in Tykeson Hall.

| Code | Title | Credits |
|---|---|---|
| **Area 1. Lower-Division ENVS Core** | | |
| ENVS 201 | Introduction to Environmental Studies: Social Sciences | 4 |
| ENVS 202 | Introduction to Environmental Studies: Natural Sciences | 4 |
| ENVS 203 | Introduction to Environmental Studies: Humanities | 4 |
| **Area 2. Lower-Division Math and Science** | | |
| MATH 111Z | Precalculus I: Functions [1] | 4 |
| Statistics course | | 4 |
| STAT 243Z | Elementary Statistics I | |
| MATH 425 | Statistical Methods I | |
| ERTH 418 | Earth and Environmental Data Analysis | |
| GEOG 495 | Geographic Data Analysis | |
| Approved introductory sequence in natural science | | 12 |
| Course from different natural science sequence or from the list of approved science courses | | 4 |
| **Area 3A. Upper-Division Natural Science** | | |
| Two upper-division natural science courses from the major requirements sheet | | 8 |
| **Area 3B. Upper-Division Soc Sci, Policy, Humanities and Design** | | |
| Social science foundation course | | 4 |
| Policy foundation course | | 4 |
| Humanities foundation course | | 4 |
| Design foundation course | | 4 |
| Six additional courses: three from one of the above areas; three from another | | 24 |
| **Area 4. Environmental Issues** | | |
| ENVS 411 | Environmental Issues: [Topic] | 4 |
| or ENVS 425 | Environmental Education Theory and Practice | |
| or ENVS 427 | Environmental and Ecological Monitoring | |
| **Area 5. Practical Learning Experience** | | |
| Choose from one of several approved practical learning experience options. These include internships, participation in the Environmental Leadership Program, research experiences with UO faculty members, honors thesis. | | 4 |
| **Total Credits** | | **92** |

[1] Recommended course; however, a university-level mathematics course that counts toward the bachelor of science mathematics requirement fulfills the requirement.

## Approved Courses

| Code | Title | Credits |
|---|---|---|
| **Introductory Sequence in Natural Science** | | |
| Life Sciences | | |
| BI 211<br>& BI 212<br>& BI 213 | General Biology I: Cells<br>and General Biology II: Organisms<br>and General Biology III: Ecology and Evolution | |

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|---|---|
| or CH 111 | Introduction to Chemical Principles |
| & BI 211 | and General Biology I: Cells |
| & BI 213 | and General Biology III: Ecology and Evolution |
| Chemistry | |
| CH 221 | General Chemistry I |
| & CH 222 | and General Chemistry II |
| & CH 223 | and General Chemistry III |
| Earth Sciences | |
| ERTH 101 | Exploring Planet Earth |
| or ERTH 201 | Dynamic Planet Earth |
| ERTH 102 | Exploring Earth's Environment |
| or ERTH 202 | Earth's Surface and Environment |
| ERTH 103 | Exploring Earth History |
| or ERTH 203 | History of Life |
| Physical Sciences | |
| CH 111 | Introduction to Chemical Principles |
| & PHYS 161 | and Physics of Energy and Environment |
| & PHYS 162 | and Solar and Other Renewable Energies |
| or PHYS 201 | General Physics |
| | and General Physics |
| & PHYS 202 | and General Physics |
| & PHYS 203 | |
| **Non-Sequence Science Courses** | |
| ANTH 170 | Introduction to Human Origins |
| ANTH 270 | Introduction to Biological Anthropology [1] |
| BI 130 | Introduction to Ecology [1] |
| CH 113 | The Chemistry of Sustainability |
| GEOG 141 | The Natural Environment |
| GEOG 181 | Our Digital Earth |
| ERTH 213 | Geology of National Parks |

[1] These courses cannot be used with the Life Science sequence.

## Upper-Division Natural Science Courses

| Code | Title | Credits |
|---|---|---|
| ANTH 341 | Food Origins | 4 |
| ANTH 361 | Human Evolution | 4 |
| ANTH 362 | Human Biological Variation | 4 |
| ANTH 463 | Primate Behavior | 4 |
| ANTH 472 | Primate Conservation Biology | 4 |
| BI 307 | Forest Biology | 4 |
| BI 309 | | 4 |
| BI 330 | Microbiology | 3 |
| BI 331 | Microbiology Laboratory | 3 |
| BI 357 | Marine Biology | 4 |
| BI 359 | Plant Biology | 4 |
| BI 370 | Ecology | 5 |
| BI 374 | Conservation Biology | 4 |
| BI 380 | Evolution | 4 |
| BI 390 | Animal Behavior | 4 |
| BI 395 | Tropical Ecology | 4 |
| BI 432 | Mycology | 5 |
| BI 442 | Systematic Botany | 5 |
| BI 448 | Field Botany | 4 |
| BI 451 | Invertebrate Zoology [1] | 1-8 |
| BI 452 | | 4 |
| BI 454 | Estuarine Biology | 5 |
| BI 455 | Marine Birds and Mammals | 1-6 |
| BI 457 | Marine Biology: [Topic] | 1-8 |
| BI 458 | Biological Oceanography | 5 |
| BI 468 | Amphibians and Reptiles of Oregon | 4 |
| BI 471 | Population Ecology | 4 |
| BI 472 | Community Ecology | 4 |
| BI 474 | Marine Ecology [1] | 1-8 |
| BI 476 | | 4 |
| CH 331 | Organic Chemistry I | 4 |
| CH 335 | Organic Chemistry II | 4 |
| CH 336 | Organic Chemistry III | 4 |
| ENVS 350 | Ecological Footprint of Energy Generation | 4 |
| ENVS 465 | Wetland Ecology and Management | 4 |
| ENVS 477 | Soil Science | 4 |
| GEOG 321 | Climatology | 4 |
| GEOG 322 | Geomorphology | 4 |
| GEOG 323 | Biogeography | 4 |
| GEOG 360 | Watershed Science and Policy | 4 |
| GEOG 361 | Global Environmental Change | 4 |
| GEOG 425 | Hydrology and Water Resources | 4 |
| GEOG 427 | Fluvial Geomorphology | 4 |
| GEOG 430 | Long-Term Environmental Change | 4 |
| GEOG 433 | Fire and Natural Disturbances | 4 |
| GEOG 481 | GIScience I | 4 |
| GEOG 482 | GIScience II | 4 |
| GEOG 485 | Remote Sensing I | 4 |
| GEOG 486 | Remote Sensing II | 4 |
| GEOG 491 | Advanced Geographic Information Systems | 4 |
| ERTH 304 | The Fossil Record [2] | 4 |
| ERTH 305 | Dinosaurs [2] | 4 |
| ERTH 306 | Volcanoes and Earthquakes [2] | 4 |
| ERTH 307 | Oceanography [2] | 4 |
| ERTH 308 | Geology of Oregon and the Pacific Northwest [2] | 4 |
| ERTH 310 | Earth Resources and the Environment | 4 |
| ERTH 311 | Earth Materials | 5 |
| ERTH 315 | Earth Physics | 4 |
| ERTH 316 | Introduction to Hydrogeology | 4 |
| ERTH 331 | Mineralogy | 5 |
| ERTH 332 | Introduction to Petrology | 5 |
| ERTH 334 | Sedimentology and Stratigraphy | 4 |
| ERTH 350 | Structural Geology | 3 |
| ERTH 353 | Geologic Hazards | 4 |
| ERTH 425 | | 5 |
| ERTH 433 | | 4 |
| ERTH 434 | Vertebrate Paleontology | 4 |
| ERTH 435 | | 4 |
| ERTH 438 | | 4 |

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|---|---|---|
| ERTH 441 | Hillslope Geomorphology | 4 |
| ERTH 451 | Hydrogeology | 4 |
| ERTH 462 | | 4 |
| ERTH 468 | Introduction to Seismology | 4 |
| ERTH 472 | | 4 |
| ERTH 473 | Isotope Geochemistry | 4 |

[1] If 8 credits, then counts as 2 courses.
[2] Only one course of ERTH 30X will apply.

## Upper-Division Social Science, Policy, Humanities, and Design Courses

| Code | Title | Credits |
|---|---|---|
| **Social Science - Foundation Courses** | | |
| ENVS 435 | Environmental Justice | 4 |
| ENVS 450 | Political Ecology | 4 |
| ENVS 455 | Sustainability | 4 |
| GEOG 341 | Population and Environment | 4 |
| SOC 416 | Issues in Environmental Sociology [Topic] | 4 |
| **Social Science - Elective Courses** | | |
| ANTH 320 | Native North Americans | 4 |
| ES 350 | Native Americans and the Environment | 4 |
| GEOG 342 | Geography of Globalization | 4 |
| GEOG 442 | Urban Geography | 4 |
| GEOG 465 | Environment and Development | 4 |
| GEOG 471 | | 4 |
| GLBL 420 | Global Community Development | 4 |
| GLBL 421 | Gender and International Development | 4 |
| GLBL 432 | | 4 |
| SOC 304 | Community, Environment, and Society | 4 |
| WGS 331 | Science, Technology, and Gender | 4 |
| **Policy - Foundation Courses** | | |
| ENVS 335 | Allocating Scarce Environmental Resources | 4 |
| PPPM 443 | Natural Resource Policy | 4 |
| PPPM 444 | Environmental Policy | 4 |
| PS 367 | Politics, Science, and Climate Change | 4 |
| PS 477 | International Environmental Politics | 4 |
| **Policy - Elective Courses** | | |
| EC 330 | Urban and Regional Economic Problems | 4 |
| EC 333 | Resource and Environmental Economic Issues | 4 |
| EC 434 | Environmental Economics | 4 |
| EC 435 | | 4 |
| GEOG 467 | | 4 |
| PPPM 331 | Environmental Management | 4 |
| PPPM 340 | Climate Change Policy | 4 |
| PPPM 418 | Introduction to Public Law | 4 |
| PPPM 438 | Transportation Issues in Planning: [Topic] | 4 |
| PPPM 446 | Socioeconomic Development Planning | 4 |
| PPPM 480 | Nonprofit Management | 4 |
| **Humanities - Foundation Courses** | | |
| ENG 469 | | 4 |
| ENVS 345 | Environmental Ethics | 4 |
| HIST 378 | American Environmental History to 1890 | 4 |
| HIST 379 | American Environmental History 1890 to Present | 4 |
| HIST 473 | American Environmental History: [Topic] | 4 |
| PHIL 340 | Environmental Philosophy | 4 |
| **Humanities - Elective Courses** | | |
| ENG 325 | Literature of the Northwest | 4 |
| PHIL 309 | Global Justice | 4 |
| PHIL 339 | Introduction to Philosophy of Science | 4 |
| PHIL 345 | Place in the Cosmos | 4 |
| **Design - Foundation Courses** | | |
| ARCH 431 | Community Design | 3 |
| ARCH 435 | Principles of Urban Design | 4 |
| ENVS 467 | Sustainable Agriculture | 4 |
| PPPM 442 | Sustainable Urban Development | 4 |
| PPPM 445 | Green Cities | 4 |
| **Design - Elective Courses** | | |
| LA 326 | Plants: Fall | 4 |
| LA 337 | Landscape Field Work: [Topic] | 1-4 |
| LA 390 | Urban Farm | 2-4 |
| LA 429 | Civic Agriculture | 4 |

# Four-Year Degree Plan

*The degree plan shown is only a sample of how students may complete their degrees in four years. There are alternative ways. Students should consult their advisor to determine the best path for them.*

## Bachelor of Arts in Environmental Studies (Policy and Social Science Focus)

| Course | Title | Credits | Milestones |
|---|---|---|---|
| **First Year** | | | |
| **Fall** | | | |
| ENVS 201 | Introduction to Environmental Studies: Social Sciences | 4 | |
| WR 121Z | Composition I | 4 | |
| First term of first-year second-language sequence | | 4 | |
| General-education course | | 4 | |
| | **Credits** | **16** | |
| **Winter** | | | |
| ENVS 202 | Introduction to Environmental Studies: Natural Sciences | 4 | |
| WR 122Z | Composition II | 4 | |
| Second term of first-year second-language sequence | | 4 | |
| General-education course | | 4 | |
| | **Credits** | **16** | |
| **Spring** | | | |
| ENVS 203 | Introduction to Environmental Studies: Humanities | 4 | |
| Third term of first-year second-language sequence | | 4 | |
| MATH 111Z | Precalculus I: Functions | 4 | |

| | | |
|---|---|---|
| General-education course that also satisfies international cultures multicultural requirement | | 4 |
| | **Credits** | **16** |
| | **Total Credits** | **48** |

| Course | Title | Credits Milestones |
|---|---|---|
| **Second Year** | | |
| **Fall** | | |
| First term of second-year second-language sequence | | 4 |
| ERTH 201 | Dynamic Planet Earth | 4 |
| SOC 312 | Statistical Analysis in Sociology | 4 |
| General-education course | | 4 |
| | **Credits** | **16** |
| **Winter** | | |
| Second term of second-year second-language sequence | | 4 |
| ERTH 202 | Earth's Surface and Environment | 4 |
| General-education course | | 4 |
| General-education course that also satisfies international cultures multicultural requirement | | 4 |
| | **Credits** | **16** |
| **Spring** | | |
| Third term of second-year second-language sequence | | |
| ERTH 203 | History of Life | 4 |
| General-education courses | | 8 |
| | **Credits** | **12** |
| | **Total Credits** | **44** |

| Course | Title | Credits Milestones |
|---|---|---|
| **Third Year** | | |
| **Fall** | | |
| ANTH 170 | Introduction to Human Origins | 4 |
| GEOG 341 | Population and Environment | 4 |
| PS 477 | International Environmental Politics | 4 |
| General-education course | | 4 |
| | **Credits** | **16** |
| **Winter** | | |
| GEOG 321 | Climatology | 4 |
| LA 440 | Introduction to Landscape Planning Analysis | 4 |
| PHIL 340 | Environmental Philosophy | 4 |
| Course that satisfies minor requirements | | 4 |
| | **Credits** | **16** |
| **Spring** | | |
| ES 350 | Native Americans and the Environment | 4 |
| ERTH 304 | The Fossil Record | 4 |
| Course that satisfies minor requirements | | 4 |
| | **Credits** | **12** |
| | **Total Credits** | **44** |

| Course | Title | Credits Milestones |
|---|---|---|
| **Fourth Year** | | |
| **Fall** | | |
| GLBL 425 | Global Food Security | 4 |
| Course that satisfies minor requirements | | 4 |
| | **Credits** | **8** |
| **Winter** | | |
| ENVS 411 | Environmental Issues: [Topic] (Environmental Interpretation) | 4 |
| GLBL 446 | Development and Social Change in Latin America | 4 |
| Course that satisfies minor requirements | | 4 |
| | **Credits** | **12** |
| **Spring** | | |
| EC 330 | Urban and Regional Economic Problems | 4 |
| ENVS 404 | Internship: [Topic] | 1-12 |
| Course that satisfies minor requirements | | 4 |
| | **Credits** | **9-20** |
| | **Total Credits** | **29-40** |

## Bachelor of Science in Environmental Studies (Humanities and Sustainable Design Focus)

| Course | Title | Credits Milestones |
|---|---|---|
| **First Year** | | |
| **Fall** | | |
| ENVS 201 | Introduction to Environmental Studies: Social Sciences | 4 |
| WR 121Z | Composition I | 4 |
| General-education course in arts and letters | | 4 |
| Multicultural course in international cultures | | 4 |
| | **Credits** | **16** |
| **Winter** | | |
| ENVS 202 | Introduction to Environmental Studies: Natural Sciences | 4 |
| WR 122Z | Composition II | 4 |
| General-education course in social science | | 4 |
| General-education course in arts and letters | | 4 |
| | **Credits** | **16** |
| **Spring** | | |
| ENVS 203 | Introduction to Environmental Studies: Humanities | 4 |
| MATH 111Z | Precalculus I: Functions | 4 |
| Multicultural course in identity, pluralism, and tolerance | | 4 |
| General-education course in arts and letters | | 4 |
| | **Credits** | **16** |
| | **Total Credits** | **48** |

| Course | Title | Credits | Milestones |
|---|---|---|---|
| **Second Year** | | | |
| **Fall** | | | |
| CH 111 | Introduction to Chemical Principles | 4 | |
| MATH 112Z | Precalculus II: Trigonometry | 4 | |
| GEOG 141 | The Natural Environment | 4 | |
| General-education course in social science | | 4 | |
| | **Credits** | **16** | |
| **Winter** | | | |
| BI 211 | General Biology I: Cells | 5 | |
| General-education course in arts and letters | | 4 | |
| STAT 243Z | Elementary Statistics I | 4 | |
| Elective course | | 4 | |
| | **Credits** | **17** | |
| **Spring** | | | |
| BI 213 | General Biology III: Ecology and Evolution | 5 | |
| GEOG 341 | Population and Environment | 4 | |
| PS 367 | Politics, Science, and Climate Change | 4 | |
| Elective course | | 4 | |
| | **Credits** | **17** | |
| | **Total Credits** | **50** | |

| Course | Title | Credits | Milestones |
|---|---|---|---|
| **Third Year** | | | |
| **Fall** | | | |
| ENVS 345 | Environmental Ethics | 4 | |
| PPPM 445 | Green Cities | 4 | |
| BI 357 | Marine Biology | 4 | |
| Elective course | | 4 | |
| | **Credits** | **16** | |
| **Winter** | | | |
| ENG 325 | Literature of the Northwest | 4 | |
| LA 390 | Urban Farm | 4 | |
| BI 307 | Forest Biology | 4 | |
| Elective course | | 4 | |
| | **Credits** | **16** | |
| **Spring** | | | |
| HIST 378 | American Environmental History to 1890 | 4 | |
| ENVS 467 | Sustainable Agriculture | 4 | |
| Elective courses | | 8 | |
| | **Credits** | **16** | |
| | **Total Credits** | **48** | |

| Course | Title | Credits | Milestones |
|---|---|---|---|
| **Fourth Year** | | | |
| **Fall** | | | |
| ENVS 411 | Environmental Issues: [Topic] | 4 | |
| PHIL 309 | Global Justice | 4 | |
| Elective course | | 4 | |
| | **Credits** | **12** | |
| **Winter** | | | |
| ARCH 435 | Principles of Urban Design | 4 | |
| Elective courses | | 8 | |
| | **Credits** | **12** | |
| **Spring** | | | |
| ENVS 404 | Internship: [Topic] | 4 | |
| Elective courses | | 8 | |
| | **Credits** | **12** | |
| | **Total Credits** | **36** | |