Environmental Studies

Mark Carey, Program Director
541-346-5000
541-346-5954 fax
144 Columbia Hall
5223 University of Oregon
Eugene, Oregon 97403-5223

Environmental studies crosses the boundaries of traditional disciplines in the natural sciences, social sciences, humanities, management, policy, design, and law. It challenges faculty members and students to look at the relationship between humans and their environment from new perspectives. The Environmental Studies Program is dedicated to gaining greater understanding of the natural world from an ecological perspective; devising policies and behaviors that address contemporary environmental problems; and promoting a rethinking of basic cultural premises, ways of structuring knowledge, and the root metaphors of contemporary society.

Faculty

Core faculty members listed in the faculty list have dedicated responsibilities in the program. Participating faculty members have demonstrated professional interests in environmental studies by researching environmental issues, teaching courses that meet program requirements, or participating in a variety of program activities on a voluntary basis. They are all available to advise students who are interested in environmental studies. More information about the faculty is available on the program website.

Resources

The program’s resource center has a limited collection of books related to environmental topics. University of Oregon students and members of the faculty and staff may borrow items for up to two weeks.

Faculty

Brendan J. M. Bohannan, associate professor (microbial ecology). See Biology.

Peg Boulay, senior instructor (environmental monitoring, wildlife conservation, outreach and education); codirector, environmental leadership. BS, 1989, Furman; MS, 1992, Florida. (2009)

Scott D. Bridgham, professor (ecosystem ecology, climate change). See Biology.

Trudy Ann Cameron, Raymond F. Mikesell Professor of Environmental and Resource Economics (environmental economics). See Economics.

Mark Carey, professor (glaciers, climate change, natural disasters). See Robert Donald Clark Honors College.

Matthew Dennis, professor (colonial and early national America, American cultural and environmental history, American Indian history). See History.

Lauren Hallett, assistant professor (plant community and restoration ecology). See Biology.

Stephanie LeMenager, Barbara and Carlisle Moore Distinguished Professor in English and American Literature. See English.

Kathryn A. Lynch, senior instructor (environmental leadership, tropical conservation, environmental education); codirector, environmental leadership. BS, 1992, California, Davis; MA, 1995, PhD, 2001, Florida. (2005)

Kathy Lynn, research assistant (Tribal Climate Change Project).


Galen Martin, senior instructor (sustainable agriculture, food systems).

Patricia F. McDowell, professor (river management and restoration); director, graduate studies. See Geography.

Ronald B. Mitchell, professor (environmental politics, international relations). See Political Science.

Erin Moore, associate professor (life-cycle environmental impacts). See Architecture.

Nicolaie Morar, assistant professor (applied ethics, recent continental philosophy, philosophy of biology). See Philosophy.

Barbara Muraca, assistant professor (human-nature relationships, ecosystem services valuation, sustainability theory). See Philosophy.


Alexandra Rempel, assistant professor (environmental design, passive heating and cooling). MArch, 2009, Oregon; PhD, 1996, Massachusetts Institute of Technology. (2011)


Kory Russel, acting assistant professor (sustainable design; water, public health, and environment). See Landscape Architecture.

Emily Scott, assistant professor (art and the public sphere, critical approaches to the built environment, visual cultures of nature). See History of Art and Architecture.


David Sutherland, assistant professor (ice-ocean interaction, coastal and estuarine oceanography). See Earth Sciences.

Sarah Wald, associate professor (race and ethnic studies, environmental humanities).

Peter A. Walker, professor (environmental politics, political ecology). See Geography.

Marsha Weisiger, Rocky and Julie Dixon Chair of U.S. Western History; associate professor (environmental, Native American, American West). See History.

Richard York, associate professor (assessing anthropogenic driving forces of global environmental change). See Environmental Studies.

Emeritus
Alan Dickman, professor emeritus. See Sociology.

The date in parentheses at the end of each entry is the first year on the University of Oregon faculty.

Participating
Susan C. Anderson, German and Scandinavian
William S. Ayres, anthropology
Patrick J. Bartlein, geography
Carla Bengtson, art
Ann Bettman, landscape architecture
Aletta Biersack, anthropology
Thomas H. Bivins, journalism and communication
John E. Bonine, law
Gregory D. Bothun, physics
William E. Bradshaw, biology
Yvonne A. Braun, international studies
G. Z. Brown, architecture
George C. Carroll, biology
Suzanne Clark, English
Shaul E. Cohen, geography
John S. Conery, computer and information science
William A. Cresko, biology
James R. Crosswhite, English
Edward B. Davis, Museum of Natural and Cultural History
Jerome Diethelm, landscape architecture
Rebecca J. Dorsey, geological science
Michael C. Dreiling, sociology
Richard B. Emlet, biology
Paul C. Engelking, chemistry and biochemistry
Arthur M. Farley, computer and information science
Mark Fonstad, geography
John B. Foster, sociology
John T. Gage, English
Dennis Galvin, international studies
Daniel Gavin, geography

Daniel Goldrich, political science
Jessica L. Green, biology
Patricia A. Gwartney, sociology
William T. Harbaugh, economics
Jill A. Harrison, sociology
Kenneth I. Helphand, landscape architecture
Michael Hibbard, planning, public policy and management
Richard G. Hildreth, law
Derrick Hindery, international studies
Janet Hodder, Oregon Institute of Marine Biology
Garrett K. Hongo, creative writing
Samantha Hopkins, honors college
Carl J. Hosticka, planning, public policy and management
David Hulse, landscape architecture
James E. Hutchison, chemistry and biochemistry
Renee A. Irvin, planning, public policy and management
Colin Ives, art
Grant Jacobsen, planning, public policy and management
Bart Johnson, landscape architecture
Leigh Johnson, geography
Mark Johnson, philosophy
Lamia Karim, anthropology
Craig Kauffman, political science
Lauren J. Kessler, journalism and communication
Gyoung-Ah Lee, anthropology
Raoul S. Liévanos, sociology
Glen A. Love, English
Bonnie Mann, philosophy
W. Andrew Marcus, geography
Theresa May, theater arts
Erin McKenna, philosophy
Gregory McLauchlan, sociology
Jerry F. Medler, political science
Kate Meehan, geography
Robert Z. Melnick, landscape architecture
Debra L. Merskin, journalism and communication
Undergraduate Studies

The program offers undergraduate instruction through two majors, leading to a bachelor of arts (BA) or a bachelor of science (BS) degree. A minor in environmental studies is also offered.

Both majors provide a broad, solid, interdisciplinary perspective on the relationship between humans and nature. Their goals are to develop awareness of environmental issues and to develop an understanding of the nature and scope of the forces underlying environmental problems, the various approaches used to bring environmental problems to the public’s attention, and the methods and approaches used to solve these problems.

Majors gain an appreciation of the interdisciplinary nature of environmental studies, and they master content and skills associated with a number of different disciplines.

Majors and minors have considerable latitude in designing a course of study that combines theory and practice, invites active participation, and fits specific interests, needs, and aptitudes. The majors, which provide a well-rounded basic education, prepare students for entry-level positions in business, government, nongovernmental and nonprofit organizations, and for a variety of graduate and professional degree programs. Students are encouraged to take advantage of career planning services offered by the University Career Center.

The environmental studies major focuses on social sciences, policy studies, the humanities, and sustainable design. It is designed for students who are interested in such areas as environmental policy, planning, ethics or philosophy, ecocriticism, ecofeminism, environmental justice, sustainable development, international environmental issues, or social theory and the environment.

The environmental science major is designed for students who want to focus on scientific careers in conservation biology, climate science, pollution prevention and abatement, or ecosystem protection, restoration, and management.

Students should plan their programs early in their undergraduate careers with the aid of an environmental studies academic advisor. Majors are urged to consider completing a second major or a minor in a related field. The program offers drop-in student advising in the main office.

Up-to-date information, major requirements sheets, and tip sheets are available in the program office and on the website.

Major Requirements

The environmental studies curriculum is designed to provide a solid foundation in the sciences, social sciences, and humanities; to build on these foundations in advanced course work in a variety of disciplines; to develop the skills necessary to study human-environment interactions; and to encourage participation in experiential learning activities that help
students prepare for active participation in the work force and in local and global communities. Students should have a strong foundation in written and verbal skills.

Courses applied to the major, except environmental studies courses numbered 401 through 409, must be taken for letter grades and passed with grades of C– or better. As many as four upper-division courses may be used to fulfill requirements of another major. At least 24 credits must be taken at the University of Oregon.

Bachelor of Arts in Environmental Studies

Upper-division credit may be earned through course work or through a combination of course work and an honors thesis. Major requirements sheets containing detailed information about specific courses that meet the major requirements are available on the program website (http://envs.uoregon.edu/undergrad/envsfocus), in the program office, or from an environmental studies advisor.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENVS 201</td>
<td>Introduction to Environmental Studies: Social Sciences</td>
<td>4</td>
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<tr>
<td>ENVS 202</td>
<td>Introduction to Environmental Studies: Natural Sciences</td>
<td>4</td>
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<tr>
<td>ENVS 203</td>
<td>Introduction to Environmental Studies: Humanities</td>
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Lower-Division Mathematics and Science Courses

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<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>MATH 111</td>
<td>College Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Approved statistics course

Approved introductory sequence in natural science 

Course from different natural science sequence or from the list of approved science courses

Upper-Division Natural Science Courses

Two upper-division natural science courses from the major requirements sheet

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

Social science core course

Policy core course

Humanities core course

Design core course

Six additional courses: three from one of the above areas; three from another

Environmental Issues Course

ENVS 411 | Environmental Issues: [Topic] | 4 |

or ENVS 425 | Environmental Education Theory and Practice |

or ENVS 427 | Environmental and Ecological Monitoring |

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, courses at field stations, study abroad opportunities, or IE3 internships.

Total Credits | 92 |

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

Bachelor of Science in Environmental Studies

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<tr>
<td>ENVS 203</td>
<td>Introduction to Environmental Studies: Humanities</td>
<td>4</td>
</tr>
</tbody>
</table>

Lower-Division Mathematics and Science Courses

MATH 111 | College Algebra | 4 |

Approved statistics course

Approved introductory sequence in natural science

Course from different natural science sequence or from the list of approved science courses

Upper-Division Natural Science Courses

Two upper-division natural science courses from the major requirements sheet

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

Social science core course

Policy core course

Humanities core course

Design core course

Six additional courses: three from one of the above areas; three from another

Environmental Issues Course

ENVS 411 | Environmental Issues: [Topic] | 4 |

or ENVS 425 | Environmental Education Theory and Practice |

or ENVS 427 | Environmental and Ecological Monitoring |

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, courses at field stations, study abroad opportunities, or IE3 internships.

Total Credits | 92 |

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

Bachelor of Arts in Environmental Science

The major requires a minimum of 112 credits including 60 upper-division credits. Upper-division credits may be earned through course work or through a combination of course work and an honors thesis. Sample course plans are available on the program’s website. Major requirements sheets containing detailed information about specific courses that meet the major requirements are available in the program office, from
an environmental science advisor, or on the program website (http://
envs.oregon.edu/undergrad/escifocus).

### Lower-Division Core Courses

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<tbody>
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<td>ENVS 201</td>
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<td>Introduction to Environmental Studies: Humanities</td>
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### Mathematics and Statistics Courses

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<th>Credits</th>
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<tbody>
<tr>
<td>MATH 246–247</td>
<td>Calculus for the Biological Sciences I-II 252</td>
<td>8</td>
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<tr>
<td>or MATH 251–252</td>
<td>Calcius I-II</td>
<td></td>
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</table>

Approved statistics course 4
Approved course in analytical approaches 4

### Lower-Division Introductory Science Sequences

Two introductory sequences in focal area 24
Up to three approved introductory courses in nonfocal area 1 12

### Upper-Division Natural Science Courses

Six upper-division natural science courses in focal area (life sciences or earth and physical sciences) 24
At least two upper-division courses in nonfocal area 1 8

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

Three courses from the areas of social science, policy, humanities, or design (no more than one course per area) 12

### Environmental Issues Course

<table>
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<tr>
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<tbody>
<tr>
<td>ENVS 411</td>
<td>Environmental Issues: [Topic]</td>
<td>4</td>
</tr>
<tr>
<td>or ENVS 425</td>
<td>Environmental Education Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>or ENVS 427</td>
<td>Environmental and Ecological Monitoring</td>
<td></td>
</tr>
</tbody>
</table>

### 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, and courses at field stations. 4

Total Credits 112

1 Five courses total are required for nonfocal area.

### Options for Majors

#### Environmental Leadership Program

Through the Environmental Leadership Program, students team up with local businesses, nonprofit organizations, and government agencies to work on environmental projects. Students learn professional research, writing, and presentation skills as they develop a network of professional relationships in the region. Participants make a two- or three-term commitment, for which they earn 8–12 upper-division credits. These credits satisfy upper-division requirements for the environmental studies and environmental science majors.

#### Internships

By offering academic credit for environmentally focused work experience, the internship program allows students to connect their academic studies with practical applications. Internship positions must involve significant work with an environmental focus. Potential internship sponsors include public interest nonprofits, government agencies, and private corporations. Students are expected to be self-motivated and arrange their own positions in their areas of particular interest. However, if a student needs assistance finding an appropriate position program, the internship coordinator can help identify potential opportunities. Students may take 18 credits of Field Studies: [Topic] (ENVS 196), Internship: [Topic] (ENVS 404), or both. To fulfill the practical learning experience requirement, students take 4 credits (which translates to 120 hours) of internship service.

#### Honors

Students who want to graduate with honors in environmental science or environmental studies must have a 3.30 overall grade point average (GPA) and a 3.50 GPA in courses required for the major. Honors candidates must also complete a research-based thesis or creative project under the direction of a faculty advisor. Students preparing to
graduate with honors should notify their advisor no later than the first term of their senior year.

Honors students who are not enrolled in the Clark Honors College must earn 8 credits of Research: [Topic] (ENVS 401), Thesis (ENVS 403), or both in environmental studies or another appropriate department. These credits must be distributed over at least two terms. Environmental science majors may substitute these credits for one upper-division natural science elective, environmental studies majors for one upper-division social science or humanities elective. This can also count for the practical learning experience requirement.

Environmental Studies Minor

The interdisciplinary minor in environmental studies includes three lower-division courses and five upper-division elective courses for a minimum of 32 credits. Courses applied to the minor must be taken for letter grades and passed with grades of C– or better. At least 16 of the 40 credits must be taken at the University of Oregon. No more than 8 upper-division credits from the major may be applied to minor requirements. With the advisor’s consent, an environmental issues course and a practical learning experience may be substituted for one of the elective courses. Students may also submit a petition to their advisor to substitute one upper-division course for one of the required lower-division courses.

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<td>Introduction to Environmental Studies: Social Sciences</td>
<td>4</td>
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<tr>
<td>ENVS 202</td>
<td>Introduction to Environmental Studies: Natural Sciences</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 203</td>
<td>Introduction to Environmental Studies: Humanities</td>
<td>4</td>
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</tbody>
</table>

Advanced Course Requirements

One upper-division natural science course from the major requirements sheet 4
Four electives from areas of social science, policy, humanities, or design 16

Total Credits 32

Bachelor of Arts in Environmental Science (Life Science Focus)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Year</td>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>General-education course in arts and letters</td>
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</tr>
<tr>
<td>CH 221</td>
<td>General Chemistry I</td>
<td>4</td>
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<tr>
<td>First term of first-year second-language sequence</td>
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<tr>
<td>MATH 111</td>
<td>College Algebra</td>
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<td><strong>Winter</strong></td>
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<tr>
<td>WR 121</td>
<td>College Composition I</td>
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</tr>
<tr>
<td>CH 222</td>
<td>General Chemistry II</td>
<td>4</td>
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<tr>
<td>Second term of first-year second-language sequence</td>
<td>4</td>
<td></td>
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<tr>
<td>MATH 112</td>
<td>Elementary Functions</td>
<td>4</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
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<tr>
<td>ENVS 203</td>
<td>Introduction to Environmental Studies: Humanities</td>
<td>4</td>
</tr>
<tr>
<td>CH 223</td>
<td>General Chemistry III</td>
<td>4</td>
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<tr>
<td>Third term of first-year second-language sequence</td>
<td>4</td>
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<tr>
<td>MATH 251 or MATH 246</td>
<td>Calculus I or Calculus for the Biological Sciences I</td>
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Credits 16

Total Credits 48

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.

- Environmental Science (p. )
- Environmental Studies
### Bachelor of Science in Environmental Science (Life Science Focus)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Milestones</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
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<td><strong>Fall</strong></td>
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<td>ENVS 201</td>
<td>Introduction to Environmental Studies: Social Sciences</td>
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<tr>
<td>WR 121</td>
<td>College Composition I</td>
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<tr>
<td>General-education group-satisfying course</td>
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<td>4</td>
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<tr>
<td>General-education course that also satisfies an international cultures multicultural requirement</td>
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<td>4</td>
<td></td>
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<tr>
<td>Credits</td>
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<td>16</td>
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<tr>
<td><strong>Winter</strong></td>
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<tr>
<td>WR 123</td>
<td>College Composition III</td>
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<td>MATH 111</td>
<td>College Algebra</td>
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<td>General-education courses</td>
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<td><strong>Spring</strong></td>
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<td>ENVS 203</td>
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<td>CH 221</td>
<td>General Chemistry I</td>
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<td>GEOL 201</td>
<td>Dynamic Planet Earth</td>
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<td>MATH 251</td>
<td>Calculus I</td>
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<tr>
<td>Multicultural course in international cultures</td>
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<td>Credits</td>
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<tr>
<td><strong>Winter</strong></td>
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<tr>
<td>CH 222</td>
<td>General Chemistry II</td>
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<td>GEOL 202</td>
<td>Earth's Surface and Environment</td>
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<td>MATH 252</td>
<td>Calculus II</td>
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<td>BI 211</td>
<td>General Biology I: Cells</td>
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<td><strong>Spring</strong></td>
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<tr>
<td>General-education course</td>
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<td>History of Life</td>
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<td>CH 223</td>
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<tr>
<td>ANTH 330</td>
<td>Hunters and Gatherers</td>
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Bachelor of Arts in Environmental Studies
(Policy and Social Science Focus)

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<tr>
<td><strong>First Year</strong></td>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>ENVS 201</td>
<td>Introduction to Environmental Studies: Social Sciences</td>
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<tr>
<td>WR 121</td>
<td>College Composition I</td>
<td>4</td>
<td>First term of first-year second-language sequence</td>
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<tr>
<td>General-education course</td>
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<tr>
<td>Credits</td>
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<tr>
<td><strong>Winter</strong></td>
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<tr>
<td>ENVS 202</td>
<td>Introduction to Environmental Studies: Natural Sciences</td>
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<td>General-education course</td>
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<td>Credits</td>
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<td><strong>Second Year</strong></td>
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<td><strong>Fall</strong></td>
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<td>GEOL 201</td>
<td>Dynamic Planet Earth</td>
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<td>SOC 312</td>
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<td>Credits</td>
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<td><strong>Winter</strong></td>
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<tr>
<td>GEOL 202</td>
<td>Earth's Surface and Environment</td>
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<td>General-education course</td>
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<td>General-education course that also satisfies international cultures multicultural requirement</td>
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<td>Credits</td>
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<tr>
<td><strong>Spring</strong></td>
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<tr>
<td>GEOL 203</td>
<td>History of Life</td>
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<td>Third term of second-year second-language sequence</td>
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<td><strong>Third Year</strong></td>
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<td><strong>Fall</strong></td>
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<tr>
<td>ANTH 170</td>
<td>Introduction to Human Origins</td>
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<tr>
<td>GEOG 341</td>
<td>Population and Environment</td>
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<td>General-education course</td>
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<tr>
<td>PS 477</td>
<td>International Environmental Politics</td>
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<tr>
<td>General-education course</td>
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<td>4</td>
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<td>Credits</td>
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<td>16</td>
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<tr>
<td><strong>Winter</strong></td>
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<tr>
<td>GEOG 321</td>
<td>Climatology</td>
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<tr>
<td>LA 440</td>
<td>Introduction to Landscape Planning Analysis</td>
<td>4</td>
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<tr>
<td>PHIL 340</td>
<td>Environmental Philosophy</td>
<td>4</td>
<td>Course that satisfies minor requirements</td>
</tr>
<tr>
<td>Credits</td>
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<td>4</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>16</td>
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</table>
Spring
ES 350  Native Americans and the Environment  4
GEOL 304  The Fossil Record  4
PPPM 327  Global Leadership and Change  4
Course that satisfies minor requirements  4
Credits  16
Total Credits  48

Course Title Credits Milestones

Fourth Year

Fall
EC 432  Economy of the Pacific Northwest  4
INTL 425  Global Food Security  4
Course that satisfies minor requirements  4
Credits  12

Winter
ENVS 411  Environmental Issues: [Topic]  4  (Environmental Interpretation)
INTL 446  Development and Social Change in Latin America  4
Course that satisfies minor requirements  4
Credits  16

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  33-44

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 121  College 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 122  College 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 111  College Algebra  4
Multicultural course in identity, pluralism, and tolerance  4
General-education course in arts and letters  4
Credits  16
Total Credits  48

Second Year

Fall
CH 111  Introduction to Chemical Principles  4
MATH 112  Elementary Functions  4
GEOG 141  The Natural Environment  4
General-education course in social science  4
Credits  16

Winter
BI 211  General Biology I: Cells  4
General-education course in arts and letters  4
MATH 243  Introduction to Methods of Probability and Statistics  4
Elective course  4
Credits  16

Spring
BI 213  General Biology III: Populations  4
GEOG 341  Population and Environment  4
PS 367  Science and Politics of Climate Change  4
Elective course  4
Credits  16
Total Credits  48

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
The Environmental Studies Program offers graduate study leading to the degrees of master of arts (MA) or master of science (MS) in environmental studies, and an interdisciplinary doctor of philosophy (PhD) degree in environmental sciences, studies, and policy. Students choose courses offered in appropriate disciplines to design a course plan based on individual goals and backgrounds. Some financial support for graduate students in the Environmental Studies Program is available through graduate teaching fellowships. Support generally consists of a stipend, health insurance, and a tuition waiver.

Application instructions and materials are available on the program’s website.

**Application Deadline**

Applicants for admission to the master’s program must submit all necessary materials online by January 15. New students are accepted for fall term only.

**Master of Arts Degree in Environmental Studies**

The master of arts degree requires demonstrated proficiency in a second language.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>Environmental studies graduate core sequence</td>
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<tr>
<td></td>
<td>Concentration area course work</td>
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<tr>
<td></td>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Thesis or terminal project</td>
<td>12</td>
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<tr>
<td></td>
<td>Total Credits</td>
<td>57</td>
</tr>
</tbody>
</table>

1. First year.
2. Graduate-level courses related to environmental studies in each of two 12-credit concentration areas.
3. Public defense or presentation required.

**Concurrent Master’s Degrees Programs**

Environmental studies students may obtain concurrent degrees in other disciplines. Applicants must apply separately to each program. For more information, contact the program office.

**Doctor of Philosophy Degree in Environmental Sciences, Studies, and Policy**

The interdisciplinary PhD degree is offered by the Environmental Studies Program under the umbrella of the Joint-Campus Graduate Program in Environmental Sciences, Studies, and Policy, established by Oregon State University, Portland State University, and the University of Oregon.

The environmental sciences, studies, and policy program takes four or more years of study after earning the master’s degree.

**Admissions Procedure**

Admission to the PhD program must be granted by the Environmental Studies Program and approved by the focal department—another University of Oregon academic unit, chosen by the applicant, that offers a PhD degree. Applications are reviewed independently by the admissions committee in the Environmental Studies Program and in the focal department. Both committees must approve the application before the applicant can be accepted into the program. The online application must be completed and submitted by December 1 for the following fall admission.

**Doctor of Philosophy Degree Requirements**

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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>Focal department course work</td>
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<td></td>
<td>Environmental studies course work</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Focal department assessment of competence</td>
<td>3</td>
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<tr>
<td></td>
<td>Interdisciplinary assessment of competence</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 603</td>
<td>Dissertation</td>
<td>18</td>
</tr>
</tbody>
</table>

1. Completion of graduate course work as established by the focal department, which includes basic graduate-level proficiency in research methods appropriate to the designated focal discipline.
Courses taken in departments or programs outside the focal department. First-year students participate in a sequence of courses required of all incoming environmental studies graduate students.

The term "assessment of competence" is used in lieu of "comprehensive examination" in recognition of the different ways in which departments engage in such assessments.

PhD students must satisfy breadth and concentration requirements established by the Environmental Studies Program and the focal department. Working with an advisory committee, each student customizes a plan of action for completion of the degree.

Requirements may vary depending on the chosen focal department. In addition to the course work, candidates are required to complete and defend a written dissertation and receive approval of the dissertation by a committee chosen in accordance with Graduate School regulations. The committee must have at least five members. The chair and two additional members must be from the focal department. At least three members of the committee must be participants in the Environmental Studies Program.

Graduate Courses

Graduate students typically choose courses that contribute to their individual environmental focus from the Departments of Anthropology; Architecture; Biology; Chemistry and Biochemistry; Earth Sciences; Economics; English; Geography; History; Landscape Architecture; Philosophy; Physics; Planning, Public Policy and Management; Political Science; Psychology; and Sociology; from the International Studies Program; from the School of Law; and others. Consult the individual department listings in this catalog for course descriptions.

Courses

ENVS 196. Field Studies: [Topic]. 1-5 Credits.
Repeatable three times for a maximum of 20 credits.

ENVS 198. Laboratory Projects: [Topic]. 1-2 Credits.
Repeatable.

ENVS 199. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

ENVS 201. Introduction to Environmental Studies: Social Sciences. 4 Credits.
Contributions of the social sciences to analysis of environmental problems. Topics include human population, the relationship between social institutions and environmental problems, and appropriate political, policy, and economic processes.

ENVS 202. Introduction to Environmental Studies: Natural Sciences. 4 Credits.
Contributions of the natural sciences to analysis of environmental problems. Topics include biological processes, ecological principles, chemical cycling, ecosystem characteristics, and natural system vulnerability and recovery.

ENVS 203. Introduction to Environmental Studies: Humanities. 4 Credits.
Contributions of the humanities and arts to understandings of the environment. Emphasis on diverse ways of thinking, writing, creating, and engaging in environmental discourse.

ENVS 225. Introduction to Food Studies. 4 Credits.
An exploration of the field of "food studies" and examination of the role of food in historical and contemporary life in the US and around the world.

ENVS 298. Temporary Group-Satisfying Course. 4 Credits.

ENVS 335. Allocating Scarce Environmental Resources. 4 Credits.
Considerations for the design of environmental and natural resources policies and regulations: balancing society's preferences and the costs of environmental protection and resource conservation. Prereq: MATH 105 or higher.

ENVS 345. Environmental Ethics. 4 Credits.
Key concepts and various moral views surveyed; includes anthropocentrism, individualism, ecocentrism, deep ecology, and ecofeminism. Exploration includes case studies and theory.

ENVS 350. Ecological Footprint of Energy Generation. 4 Credits.
Detailed study of the ecological consequences of all forms of energy generation including fossil fuels and alternative energy sources. Open to environmental science, environmental studies, and planning, public policy and management majors only. Prereq: ENVS 201, MATH 112.

ENVS 375. Oregon Seminar. 4 Credits.
Students broaden and deepen their understanding of the materials presented in three linked courses: BI 372 Field Biology, GEOL 308 Geology of Oregon and the Pacific Northwest, and HIST 473 American Environmental History; [Topic]. Offered alternate years. Prereq: junior or senior standing.

ENVS 399. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

ENVS 400M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

ENVS 401. Research: [Topic]. 1-12 Credits.
Repeatable.

ENVS 403. Thesis. 1-8 Credits.
Repeatable.

ENVS 404. Internship: [Topic]. 1-12 Credits.
Repeatable. Prereq: Instructor's approval.

ENVS 405. Reading and Conference: [Topic]. 1-18 Credits.
Repeatable.

ENVS 406. Field Studies: [Topic]. 1-12 Credits.
Repeatable.

ENVS 407. Seminar: [Topic]. 1-5 Credits.
Repeatable.

ENVS 408. Workshop: [Topic]. 1-8 Credits.
Repeatable.

ENVS 409. Practicum: [Topic]. 1-12 Credits.
Repeatable.

ENVS 410. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.

ENVS 411. Environmental Issues: [Topic]. 4 Credits.
In depth examination of a particular environmental topic such as global warming, ecosystem restoration, energy alternatives, geothermal development, public lands management, or environmental literature. Repeatable twice when topic changes for maximum of 12 credits. Prereq: junior or senior standing.
ENVS 425. Environmental Education Theory and Practice. 4 Credits.
Learning theories, environmental literacy, and the planning, implementation, and evaluation of environmental education programs. Development of teaching materials in collaboration with a community partner for group project.
Prereq: instructor's approval.

ENVS 427. Environmental and Ecological Monitoring. 4 Credits.
Theory, design, and practice of monitoring sampling mapping, field techniques, data collection, management, analysis and presentation methods, local case studies.

ENVS 429. Environmental Leadership: [Topic]. 1-4 Credits.
Partnering with governmental agencies, nonprofit organizations, public schools and local businesses, students develop service learning projects. Repeatable twice for a maximum of 12 credits when topic changes.
Prereq: instructor's approval.

ENVS 435. Environmental Justice. 4 Credits.
Environmental justice and its impact on current decisions. Focus on civil rights law, perception of risk, and relation of sustainability and equity.
Prereq: ENVS 201.

ENVS 450. Political Ecology. 4 Credits.
Examines how social relations and economic, social, and cultural control of natural resources shape human interactions with the environment. Theory and case studies.
Prereq: ENVS 201.

ENVS 455. Sustainability. 4 Credits.
Examines the evolution of the concept of sustainability and its complex and sometimes problematic uses among scholars, policymakers, environmentalists, and businesses.
Pre- or coreq: ENVS 201; junior or senior standing.

ENVS 465. Wetland Ecology and Management. 4 Credits.
Examines management, law, and policies related to wetlands in an ecological framework; includes wetland type definitions, classification, distribution, formation and development, and restoration.
Prereq: BI 307 or BI 370 or GEOG 360.

ENVS 467. Sustainable Agriculture. 4 Credits.
Examines sustainability issues in agricultural production and current food systems. Focuses on environmental aspects of seed, water, soil, energy, and pest management.
Prereq: ENVS 201 or 202.

ENVS 477. Soil Science. 4 Credits.
Chemical and physical characteristics and classification of soils, field soil identification, soil degradation.
Prereq: CH 111 or 221 or 224H.

ENVS 493M. Passive Cooling. 4 Credits.
Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ARCH 493M.
Prereq: ARCH 491.

ENVS 494M. Passive Heating. 4 Credits.
Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus. Multilisted with ARCH 494M.
Prereq: ARCH 491 or Instructor Approval

ENVS 500M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

ENVS 503. Thesis. 1-16 Credits.
Repeatable up to eight times.

ENVS 507. Seminar: [Topic]. 1-5 Credits.
Repeatable.

ENVS 508. Workshop: [Topic]. 1-8 Credits.
Repeatable.

ENVS 510. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.

ENVS 511. Environmental Issues: [Topic]. 4 Credits.
In-depth examination of a particular environmental topic such as global warming, ecosystem restoration, energy alternatives, geothermal development, public lands management, or environmental literature. Repeatable twice when topic changes for maximum of 12 credits.

ENVS 525. Environmental Education Theory and Practice. 4 Credits.
Learning theories, environmental literacy, and the planning, implementation, and evaluation of environmental education programs. Development of teaching materials in collaboration with a community partner for group project.

ENVS 535. Environmental Justice. 4 Credits.
Environmental justice and its impact on current decisions. Focus on civil rights law, perception of risk, and relation of sustainability and equity.

ENVS 550. Political Ecology. 4 Credits.
Examines how social relations and economic, social, and cultural control of natural resources shape human interactions with the environment. Theory and case studies.

ENVS 555. Sustainability. 4 Credits.
Examines the evolution of the concept of sustainability and its complex and sometimes problematic uses among scholars, policymakers, environmentalists, and businesses.

ENVS 556. Wetland Ecology and Management. 4 Credits.
Examines management, law, and policies related to wetlands in an ecological framework; includes wetland type definitions, classification, distribution, formation and development, and restoration.

ENVS 557. Sustainable Agriculture. 4 Credits.
Examines sustainability issues in agricultural production and current food systems. Focuses on environmental aspects of seed, water, soil, energy, and pest management.

ENVS 577. Soil Science. 4 Credits.
Chemical and physical characteristics and classification of soils, field soil identification, soil degradation.

ENVS 593M. Passive Cooling. 4 Credits.
Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ARCH 593M.
Prereq: ARCH 591.

ENVS 594M. Passive Heating. 4 Credits.
Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus. Multilisted with ARCH 594M.
Prereq: ARCH 591 or Instructor Approval
ENVS 601. Research: [Topic]. 1-16 Credits.
Repeatable.

ENVS 602. Supervised College Teaching. 1-5 Credits.
Repeatable.

ENVS 603. Dissertation. 1-16 Credits.
Repeatable.

ENVS 604. Internship: [Topic]. 1-5 Credits.
Repeatable for maximum of 10 credits.

ENVS 605. Reading and Conference: [Topic]. 1-16 Credits.
Repeatable.

ENVS 606. Field Studies: [Topic]. 1-16 Credits.
Repeatable nine times.

ENVS 607. Seminar: [Topic]. 1-5 Credits.
Repeatable.

ENVS 608. Workshop: [Topic]. 1-16 Credits.
Repeatable.

ENVS 609. Terminal Project. 1-16 Credits.
Repeatable up to eight times.

ENVS 610. Experimental Course: [Topic]. 1-5 Credits.
Repeatable. A recent topic is Interdisciplinary Capstone Project.

ENVS 631. Environmental Studies Theory and Practice. 4 Credits.
Introduction to various disciplinary perspectives that contribute to environmental studies, including their research methods, vocabularies, and core concepts.

ENVS 632. Environmental Studies Research Methodology. 2 Credits.
Identifying a clear and concise research problem, developing methodology to address that problem, and the process of developing a thorough knowledge of relevant literature.

ENVS 633. Environmental Studies Thesis Development. 3 Credits.
Interdisciplinary readings in environmental studies focused on topics chosen by each student in consultation with instructor. Preparation for presentations at the Joint Campus Conference.