Environmental Studies, Minor

Director: Stefan Schnitzer, Ph.D.

The major and minor offer interdisciplinary studies on issues related to the environment. Students take core and elective courses that address the environment from a wide range of fields, including anthropology, biology and ecology, chemistry and physics, economics, history, political science, sociology, theology and ethics. The major is ideal for students who intend to pursue a career that focuses on the environment (e.g., environmental management, restoration, mitigation, consulting, policy, economics), or who intend to pursue graduate or professional school in environmental science, law, business, policy, economics, philosophy, theology or ethics.

The specific learning outcomes for graduates of the Environmental Studies major are to:

- understand the basic organization of ecosystems and their response to environmental factors
- quantitatively analyze scientific and economic data related to the environment
- have a fundamental understanding of the social, economic, political and historical components that influence the decision-making process with respect to the environment
- understand philosophical and ethical aspects of environmental issues
- gain practical experience working on environmental issues via internships
- understand and synthesize the study of the environment from the perspective of multiple disciplines

Environmental Studies Minor

The goal of the minor is to provide an overview of environmental studies, which includes the study of the ecology of natural ecosystems and the processes by which humans influence, exploit, evaluate, value, mitigate and restore their environment. Students learn to understand and address pressing environmental issues through an interdisciplinary approach. Students complete three required courses (9-10 credits) and four elective courses (12-13 credits) that cover subjects from the sciences, social sciences and humanities.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1001</td>
<td>General Biology 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3400</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1009</td>
<td>Earth and Environmental Physics</td>
<td>3</td>
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</tbody>
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Elected courses (choose one from each category, excluding those completed as required courses) and a fourth from any category 12-13

Category 1: Environmental Science

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BIOL 4401</td>
<td>Advanced Ecology</td>
</tr>
<tr>
<td>BIOL 4402</td>
<td>Experimental Ecology and Field Biology</td>
</tr>
<tr>
<td>BIOL 4403</td>
<td>Tropical Ecology in Panama</td>
</tr>
<tr>
<td>BIOL 4410</td>
<td>Conservation Biology</td>
</tr>
<tr>
<td>BIOL 4802</td>
<td>Experimental Microbiology</td>
</tr>
<tr>
<td>CEEN 3510</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>CEEN 4515</td>
<td>Environmental Chemistry</td>
</tr>
<tr>
<td>CEEN 4550</td>
<td>Water Resources Planning and Management</td>
</tr>
<tr>
<td>CEEN 4715</td>
<td>Sustainable Engineering</td>
</tr>
<tr>
<td>CHEM 1080</td>
<td>Chemistry in the World</td>
</tr>
<tr>
<td>PHYS 1007</td>
<td>Survey of Meteorology</td>
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Category 2: Anthropology/Sociology

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<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>ANTH 2203</td>
<td>Human Geography</td>
</tr>
<tr>
<td>ANTH 3153</td>
<td>Demography</td>
</tr>
<tr>
<td>ANTH 4316</td>
<td>Culture Change and Development</td>
</tr>
<tr>
<td>SOCI 3720</td>
<td>Environment and Society</td>
</tr>
<tr>
<td>SOWJ 4700</td>
<td>Global Aid and Humanitarianism</td>
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</table>

Category 3: Economics/Policy/Humanities

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<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ECON 4016</td>
<td>Environmental and Natural Resource Economics</td>
</tr>
<tr>
<td>ECON 4047</td>
<td>Development Economics</td>
</tr>
<tr>
<td>HIST 3800</td>
<td>Environmental History: Ecology and Society in the Modern World</td>
</tr>
<tr>
<td>PHIL 3350</td>
<td>Philosophy of the Environment</td>
</tr>
</tbody>
</table>
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