MINOR IN ENVIRONMENTAL SCIENCE

Learning Goals and Objectives for the minor in Environmental Science

Goal 1: Students will develop an understanding of the importance of the environment, the extent to which societal actions impact it, the need for sustainability and how that sustainability can be achieved.

Objective 1.1: Students will be able to describe the basic environmental challenges facing the world today, their causes, and possible solutions.

Objective 1.2: Students will be able to describe the scientific, ethical, and moral imperatives behind the need to protect and sustain a healthy environment, and the role of environmental science and environmental scientists in those efforts.

Goal 2: Students will develop a strong foundation in the physical and natural sciences, including environmental science, biology, chemistry, and physics.

Objective 2.1: Students will demonstrate knowledge of basic biology, including cell biology, genetics, and organismal biology.

Objective 2.2: Students will demonstrate knowledge of general chemistry and physics.

Goal 3: Students will understand the types of careers available to environmental scientists, create connections with people in the field of environmental science, and receive hands-on experience in the working world.

Objective 3.1: Students will demonstrate an understanding of the role of environmental science and scientists in societal efforts towards sustainability and complete an internship applying their knowledge to real-world issues alongside environmental professionals.

The minor in environmental science requires completion of the following (along with their respective laboratory sections) and three additional courses representing at least two of the course groups (A, B and C).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>Bio I: Cells</td>
<td>4</td>
</tr>
<tr>
<td>BIO 102</td>
<td>Bio II: Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Bio III: Organismic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENV 106</td>
<td>Exploring the Earth</td>
<td>4</td>
</tr>
<tr>
<td>ENV 102</td>
<td>Environ Theory &amp; Ethics Sem</td>
<td>3</td>
</tr>
<tr>
<td>ENV 490</td>
<td>Environmental Sci Internship</td>
<td>3</td>
</tr>
<tr>
<td>ENV 390</td>
<td>Environmental Science Seminar (2 semesters)</td>
<td>0</td>
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<tr>
<td>CHM 120 &amp; 120L</td>
<td>General Chemistry I and General Chemistry Lab I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 125 &amp; 125L</td>
<td>General Chemistry II and General Chemistry Lab II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 210 &amp; 210L</td>
<td>Organic Chemistry I and Organic Chemistry Lab I</td>
<td>3</td>
</tr>
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Three additional courses representing at least two of the following course groups (A, B and C)

Group A: Biological Sciences
- BIO 401 Animal Behavior
- BIO 405 Biomechanics

Group B: Physical Science
- CHM 420 Environmental Chemistry
- CHM 460 Water Chemistry
- CHM 215 Organic Chemistry II and Organic Chemistry Lab II

Select one of the following:
- PHY 102 & 102L General Physics II and General Physics Laboratory II
- PHY 106 & 106L University Physics II and University Physics Lab II

Group C: Environmental Studies
- DSS 460 Geographic Information Systems
- ECN 370 Economic Development
- ECN 375 Environmental Economics
- ENG 426 Nature Writing in America
- ENG 433
- HIS 386 American Environmental History
- LEO 212 Organizational Sustainability
- MKT 150 People, Planet and Profit
- MKT 450 Marketing Study Tour
- PHL 316 Food and Justice
- POL 327 Environmental Politics in Am
- SOC 316 Fair Trade: Coffee-Co-Op to Cup