ECOLOGICAL AND ENVIRONMENTAL INFORMATICS OPTION

This option is offered within the following major(s):

- Biological Data Sciences - College of Agricultural Sciences (http://catalog.oregonstate.edu/college-departments/agricultural-sciences/botany-plant-pathology/biological-data-sciences-bs-hbs/)

Students in the Ecological and Environmental Informatics Option take classes in general, population and community ecology.

**Option Code: 917**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 256</td>
<td>APPLIED DIFFERENTIAL EQUATIONS</td>
<td>4</td>
</tr>
<tr>
<td>MTH 420</td>
<td>MODELS AND METHODS OF APPLIED MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 427</td>
<td>INTRODUCTION TO MATHEMATICAL BIOLOGY</td>
<td></td>
</tr>
<tr>
<td>or ST 415</td>
<td>DESIGN AND ANALYSIS OF PLANNED EXPERIMENTS</td>
<td></td>
</tr>
</tbody>
</table>

**General Ecology**

- BI 370 | ECOLOGY | 3       |

**Molecular Ecology**

- BOT 458 | ECOSYSTEMS GENOMICS | 3       |

**Population, Community & Ecosystem Ecology**

Select three courses from the following, including at least one course from Group A and one course from Group B:

- BI 351 | MARINE ECOLOGY |
- BI 358 | SYMBIOSIS AND THE ENVIRONMENT |
- BI 481 | BIOGEOGRAPHY |
- BI 495 | DISEASE ECOLOGY |
- BOT 341 | PLANT ECOLOGY |
- BOT 413 | FOREST PATHOLOGY |
- BOT 440 | FIELD METHODS IN PLANT ECOLOGY |
- FES 341 | FOREST ECOLOGY |
- FW 321 | APPLIED COMMUNITY AND ECOSYSTEM ECOLOGY |
- FW 456 | FRESHWATER ECOLOGY AND CONSERVATION |
- FW 479 | WETLANDS AND RIPARIAN ECOLOGY |

**Group B**

- BI 483 | POPULATION BIOLOGY |
- BOT 442 | PLANT POPULATION ECOLOGY |
- FW 320 | INTRODUCTORY POPULATION DYNAMICS |

Other course with advisor approval

**Physical Environmental Science**

Select one course from the following:

- CSS 205 | SOIL SCIENCE  |
- ATS 201 | CLIMATE SCIENCE |
- GEO 202 | EARTH SYSTEMS SCIENCE |
- OC 201 | OCEANOGRAPHY |
- OC 332 | COASTAL OCEANOGRAPHY |
- OC 440 | BIOLOGICAL OCEANOGRAPHY |
- GEO 221 | ENVIRONMENTAL GEOLOGY |

Other course with advisor approval

**Environmental Informatics**

Select two courses from the following, including at least one course from Group A and one course from Group B:

**Group A**

- GEOG 201 | FOUNDATIONS OF GEOSPATIAL SCIENCE AND GIS |