ECOLOGY CONCENTRATION

Ecology Levels
Select from the following:
- BIO 442 Behavioral Ecology
- BIO 444 Population Ecology
- BIO 445 Community Ecology
- BIO 446 Ecosystem Ecology

Systems and Applications
Select from the following:
- BIO 327 Wildlife Ecology
- BIO 401 Principles of Conservation Biology
- BIO 415 Biogeography
- BOT 326 Plant Ecology
- MSCI 328 Marine Ecology

Biodiversity Courses
Select from the following:
- BIO 321 Mammalogy
- BIO 322 Ichthyology
- BIO 323 Ornithology
- BIO 324 Herpetology
- BIO 329 Vertebrate Field Zoology
- BIO 335 General Entomology
- BIO 336 Invertebrate Zoology
- BIO 429 Parasitology
- BOT 313 Taxonomy of Vascular Plants
- MSCI 224 General Microbiology I
- MSCI 437 Marine Botany

Electives
Select from Ecology Levels, Systems and Applications, and Biodiversity Courses (above) or select from the following:
- AG/ENGR/GEOG/ISLA/SCM/UNIV 350 The Global Environment
- BIO 330 Extended Field Biology Activity
- BIO 361 Principles of Animal Physiology
- BIO 400 Special Problems for Advanced Undergraduates
- BIO 419 Analytical Methods in Ecology
- BIO/NR/SS 421 Wetlands
- BIO 427 Wildlife Management
- BIO 434 Environmental Physiology
- BIO 435 Plant Physiology
- BIO/CHEM 441 Bioinformatics Applications
- BIO 461 Senior Project - Research Proposal
- BIO 462 Senior Project - Research
- BIO 463 Honors Research
- BIO 472 Current Topics in Biological Research
- BIO/CHEM 475 Molecular Biology Laboratory
- BOT 311 Plants, People and Civilization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BOT 433</td>
<td>Field Botany: California Plant Diversity</td>
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<tr>
<td>ENGR 322/SCM 302</td>
<td>The Learn By Doing Lab Teaching Pracicum</td>
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<td>ERSC/GEOG 250</td>
<td>Physical Geography</td>
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<td>GEOG 440</td>
<td>Advanced-Applications in GIS</td>
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<td>LA/NR 218 or GEOG 318</td>
<td>Applications in GIS</td>
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<tr>
<td>MSCI 437</td>
<td>Fisheries Science and Resource Management</td>
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<td>MSCI 440</td>
<td>Communicating Ocean Sciences to Informal Audiences</td>
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<td>NR 418</td>
<td>Applied GIS</td>
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<td>SS 121</td>
<td>Introductory Soil Science</td>
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<td>SS 321</td>
<td>Soil Morphology</td>
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<td>SS 322</td>
<td>Soil Plant Relationships</td>
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<td>SS 422</td>
<td>Soil Ecology</td>
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<td>STAT 313</td>
<td>Applied Experimental Design and Regression Models</td>
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<td>STAT 419</td>
<td>Applied Multivariate Statistics</td>
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Total units: 43

1. Excess units will be applied to Electives in the Ecology concentration.
2. Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
3. If any of these courses is taken to meet a major or support requirement in the degree, it cannot be double-counted as an approved elective.
4. If BIO 461 or BIO 462 is used to meet the Senior Project Requirement, it cannot also be counted as an Elective.
5. Maximum of 6 units may be applied toward Approved Electives from "by arrangement" courses: BIO 400, BIO 461, BIO 462, BIO 463, BIO 472, ENGR 322/SCM 302.