## Ecology, Evolution, Biodiversity, and Conservation Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 363</td>
<td>Principles of Conservation Biology</td>
<td>4</td>
</tr>
<tr>
<td>LA/NR 218</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>3</td>
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<tr>
<td>or GEOG 318</td>
<td>Applications in GIS</td>
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### Biodiversity Courses
Select three from the following:

- BIO 321: Mammalogy
- BIO 322: Ichthyology
- BIO 323: Ornithology
- BIO 324: Herpetology
- BIO 335: General Entomology
- BIO 336: Invertebrate Zoology
- BOT 313: Taxonomy of Vascular Plants
- BOT 433: Field Botany: California Plant Diversity
- MCRO 224: General Microbiology I
- MSCI 437: Marine Botany

### Ecology and Evolution Courses
Select one from the following:

- BIO 415: Biogeography
- BIO 442: Behavioral Ecology
- BIO 444: Population Ecology
- BIO 445: Community Ecology
- BIO 446: Ecosystem Ecology
- BOT 326: Plant Ecology
- MSCI 436: Microbial Ecology
- MSCI 300: Marine Ecology

### Conservation Courses
Select one from the following:

- BIO 427: Wildlife Management
- MSCI 428: Marine Conservation and Policy
- MSCI 439: Fisheries Science and Resource Management
- NR 416: Environmental Impact Analysis and Management

### Approved Electives
Select from the following:

- ASCI 239: Principles of Rangeland Management
- BIO 300: Research Experience for Undergraduates
- BIO 321: Mammalogy
- BIO 322: Ichthyology
- BIO 323: Ornithology
- BIO 324: Herpetology
- BIO 327: Wildlife Ecology
- BIO 329: Vertebrate Field Zoology
- BIO 330: Extended Field Biology Activity
- BIO 335: General Entomology
- BIO 336: Invertebrate Zoology
- BIO 400: Special Problems for Advanced Undergraduates
- BIO 415: Biogeography
- BIO 419: Analytical Methods in Ecology
- BIO 427: Wildlife Management
- BIO 429: Parasitology
- BIO 434: Environmental Physiology
- BIO 435: Plant Physiology
- BIO 442: Behavioral Ecology
- BIO 444: Population Ecology
- BIO 445: Community Ecology
- BIO 446: Ecosystem Ecology
- BIO 450: Undergraduate Laboratory Assistantship
- BIO 461: Senior Project - Research Proposal
- BIO 462: Senior Project Research Experience
- BIO 463: Honors Research
- BOT 311: Plants, People and Civilization
- BOT 323: Plant Pathology
- BOT 326: Plant Ecology
- GEOG 440: Advanced Applications in GIS
- MCRO 224: General Microbiology I
- MSCI 436: Microbial Ecology
- MSCI 300: Marine Ecology
- MSCI 324: Marine Mammals, Birds and Reptiles
- MSCI 428: Marine Conservation and Policy
- MSCI 437: Marine Botany
- MSCI 439: Fisheries Science and Resource Management
- NR 141: Introduction to Forest Ecosystem Management
- NR 142: Environmental Management
- NR 404: Environmental Law
- NR 416: Environmental Impact Analysis and Management
- NR 418: Applied GIS
- NR 425: Applied Resource Analysis and Assessment
- SCM 302/ENGR 322: The Learn By Doing Lab Teaching Practicum
- STAT 313: Applied Experimental Design and Regression Models
- STAT 324: Applied Regression Analysis
- STAT 330: Statistical Computing with SAS
- STAT 331: Statistical Computing with R
- STAT 416: Statistical Analysis of Time Series
- STAT 419: Applied Multivariate Statistics

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1. For students with a strong background in biology.
2. For students with a strong background in environmental science.
3. Approved electives are additional courses that do not necessarily fit into the specific concentration but can be chosen with advisor approval.
<table>
<thead>
<tr>
<th>1</th>
<th>Excess units will be applied to subsequent concentration electives.</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Students seeking certification (e.g. as an Associate Wildlife Biologist from the Wildlife Society) should see their faculty advisor for guidance.</td>
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<tr>
<td>3</td>
<td>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.</td>
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<td>4</td>
<td>If a course is taken to meet a Major or Support requirement, it cannot be double-counted in the concentration.</td>
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<tr>
<td>5</td>
<td>Maximum of 6 units may be applied toward Approved Electives: BIO 300, BIO 400, BIO 450.</td>
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<tr>
<td>6</td>
<td>If BIO 461 or BIO 462 is used to meet the senior project requirement, it cannot be double-counted as an Approved Elective.</td>
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<tr>
<td>7</td>
<td>Maximum of 2 units may be applied toward Approved Electives from SCM 302/ENGR 322.</td>
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