ECOLOGY, EVOLUTION, BIODIVERSITY, AND CONSERVATION CONCENTRATION

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</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:

1. BIO 321 | Mammalogy |
2. BIO 322 | Ichthyology |
3. BIO 323 | Ornithology |
4. BIO 324 | Herpetology |
5. BIO 335 | General Entomology |
6. BIO 336 | Invertebrate Zoology |
7. BOT 313 | Taxonomy of Vascular Plants |
8. BOT 433 | Field Botany: California Plant Diversity |
9. MCRM 224 | General Microbiology I |
10. MCRM 437 | Marine Botany |

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

1. BIO 415 | Biogeography |
2. BIO 442 | Behavioral Ecology |
3. BIO 444 | Population Ecology |
4. BIO 445 | Community Ecology |
5. BIO 446 | Ecosystem Ecology |
6. BOT 326 | Plant Ecology |
7. MCRM 436 | Microbial Ecology |
8. MCRM 300 | Marine Ecology |

**Conservation Courses**
Select one from the following:

1. BIO 427 | Wildlife Management |
2. MCRM 428 | Marine Conservation and Policy |
3. MCRM 439 | Fisheries Science and Resource Management |
4. NR 416 | Environmental Impact Analysis and Management |

**Approved Electives**
Select from the following:

16. ASCI 239 | Principles of Rangeland Management |
17. BIO 300 | Research Experience for Undergraduates |
18. BIO 321 | Mammalogy |
19. BIO 322 | Ichthyology |
20. BIO 323 | Ornithology |
21. BIO 324 | Herpetology |
22. BIO 327 | Wildlife Ecology |
23. BIO 329 | Vertebrate Field Zoology |
24. BIO 330 | Extended Field Biology Activity |
25. BIO 335 | General Entomology |
26. BIO 336 | Invertebrate Zoology |
27. BIO 400 | Special Problems for Advanced Undergraduates |
28. BIO 415 | Biogeography |
29. BIO 419 | Analytical Methods in Ecology |
30. BIO 427 | Wildlife Management |
31. BIO 429 | Parasitology |
32. BIO 434 | Environmental Physiology |
33. BIO 435 | Plant Physiology |
34. BIO 442 | Behavioral Ecology |
35. BIO 444 | Population Ecology |
36. BIO 445 | Community Ecology |
37. BIO 446 | Ecosystem Ecology |
38. BIO 450 | Undergraduate Laboratory Assistantship |
39. BIO 461 | Senior Project - Research Proposal |
40. BIO 462 | Senior Project Research Experience |
41. BIO 463 | Honors Research |
42. BOT 311 | Plants, People and Civilization |
43. BOT 323 | Plant Pathology |
44. BOT 326 | Plant Ecology |
45. GEOG 440 | Advanced-Applications in GIS |
46. MCRM 224 | General Microbiology I |
47. MCRM 436 | Microbial Ecology |
48. MCRM 300 | Marine Ecology |
49. MCRM 324 | Marine Mammals, Birds and Reptiles |
50. MCRM 428 | Marine Conservation and Policy |
51. MCRM 437 | Marine Botany |
52. MCRM 439 | Fisheries Science and Resource Management |
53. NR 141 | Introduction to Forest Ecosystem Management |
54. NR 142 | Environmental Management |
55. NR 404 | Environmental Law |
56. NR 416 | Environmental Impact Analysis and Management |
57. NR 418 | Applied GIS |
58. NR 425 | Applied Resource Analysis and Assessment |
59. SCM 302/ | The Learn By Doing Lab Teaching |
60. ENGR 322 | Practicum |
61. STAT 313 | Applied Experimental Design and Regression Models |
62. STAT 324 | Applied Regression Analysis |
63. STAT 334 | Applied Linear Models |
64. STAT 330 | Statistical Computing with SAS |
65. STAT 331 | Statistical Computing with R |
66. STAT 416 | Statistical Analysis of Time Series |
67. STAT 419 | Applied Multivariate Statistics |
STAT 421  Survey Sampling and Methodology

| Total units | 43 |

1. Excess units will be applied to subsequent concentration electives.
2. Students seeking certification (i.e. as an Associate Wildlife Biologist from the Wildlife Society) should see their faculty advisor for guidance.
3. 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.
4. Courses taken to meet a major or support requirement cannot be double-counted as an elective.
5. Maximum of 6 units may be applied toward Approved Electives: BIO 300, BIO 400, BIO 450.
6. If BIO 461 or BIO 462 is used to meet the Senior Project Requirement, it cannot also be counted as an Elective.
7. Maximum of 2 units may be applied toward Approved Electives from SCM 302/ENGR 322.