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
MCRO 224 General Microbiology I
MSCI 437 Marine Botany

Ecology Electives
Select from the following:

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 361 Principles of Animal Physiology
BIO 400 Special Problems for Advanced Undergraduates
BIO 401 Principles of Conservation Biology
BIO 415 Biogeography
BIO 419 Analytical Methods in Ecology
BIO/NR/SS 421 Wetlands
BIO 427 Wildlife Management
BIO 429 Parasitology
BIO 434 Environmental Physiology
BIO 435 Plant Physiology
BIO/CHEM 441 Bioinformatics Applications
BIO 442 Behavioral Ecology
BIO 444 Population Ecology
BIO 445 Community Ecology
BIO 446 Ecosystem Ecology

BIO 444 Population Ecology
BIO 445 Community Ecology
BIO 446 Ecosystem Ecology
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
BOT 313 Taxonomy of Vascular Plants
BOT 326 Plant Ecology
BOT 433 Field Botany: California Plant Diversity
MCRO 224 General Microbiology I
MCRO 424 Microbial Physiology
MCRO 436 Microbial Ecology
MSCI 328 Marine Ecology
MSCI 437 Marine Botany
MSCI 439 Fisheries Science and Resource Management
MSCI 440 Communicating Ocean Sciences to Informal Audiences

Approved Electives
Select from the following:

AG/EDES/ENGR/SCM/UNIV 350 The Global Environment
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 401 Principles of Conservation Biology
BIO 415 Biogeography
BIO 419 Analytical Methods in Ecology
BIO/NR/SS 421 Wetlands
BIO 427 Wildlife Management
BIO 429 Parasitology
BIO 434 Environmental Physiology
BIO 435 Plant Physiology
BIO/CHEM 441 Bioinformatics Applications
BIO 442 Behavioral Ecology
BIO 444 Population Ecology
BIO 445 Community Ecology
BIO 446 Ecosystem Ecology
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<tr>
<th>Course Code</th>
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<td>BIO 461</td>
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<td>Senior Project - Research 4, 5</td>
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<td>BIO 472</td>
<td>Current Topics in Biological Research 5</td>
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<td>BIO/CHEM 475</td>
<td>Molecular Biology Laboratory</td>
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<td>BOT 433</td>
<td>Field Botany: California Plant Diversity</td>
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<td>ENGR 322/SCM 302</td>
<td>The Learn By Doing Lab Teaching Practicum 5</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 subsequent concentration electives.
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. Courses taken to meet a major or support requirement cannot be double-counted as an 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.
6. Recommended for students interested in health science careers.