# Bachelor of Science in Natural Resources: Conservation Biology

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite?</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite?</th>
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<tbody>
<tr>
<td><strong>FALL</strong></td>
<td></td>
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<td><strong>SPRING</strong></td>
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<tr>
<td>CHEM 151 OR CHEM 141 and 143</td>
<td>4</td>
<td>MATH 112 or placement</td>
<td>CHEM 152 OR CHEM 142 and 144</td>
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<td>1st semester Chemistry</td>
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<tr>
<td>ENGL 101 or 109H</td>
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<td>ENGL 102</td>
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<tr>
<td>Tier 1 Traditions and Cultures</td>
<td>3</td>
<td></td>
<td>ECOL 182R and L General Biology Lecture and Lab</td>
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<tr>
<td>RNR 200 Conservation of Natural Environments</td>
<td>3</td>
<td></td>
<td>Calculus: MATH 113, 122B, or 125 (Calculus)</td>
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<td>MATH 112 or placement test</td>
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<tr>
<td>Tier 1 Individuals and Societies</td>
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<tr>
<td>Tier 2 Individuals and Societies</td>
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<td>Tier 2 Arts or Humanities</td>
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<tr>
<td>RNR 316 Natural Resources Ecology</td>
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<td>Tier 1 Traditions and Cultures</td>
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<td>Statistics: MATH 163 or 263, or PSY 230, or SBS 200</td>
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<td>MATH 112 or placement</td>
<td>ECON 200</td>
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<tr>
<td>RNR 230R and 230L Field Botany</td>
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<td>Technical Writing: ENGL 308, 313, 340, or 414, ENVS 408 or 415</td>
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<tr>
<td>MCB 181R and L General Biology Lecture and Lab</td>
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<td>MATH 112 or placement; CHEM 151</td>
<td>RNR 384 Natural Resources Management Practices</td>
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<td>Natural Resources Management course (see list)</td>
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<td>RNR 316 recommended</td>
<td>ECOL 406R: Conservation Biology</td>
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<td>Organismal Biology Course (see list)</td>
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<td>Technical Electives</td>
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<td>Environment Elective</td>
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<td>Social Dimensions course (see list)</td>
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<td>PLS 312 or ECOL 320 Genetics</td>
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<td>MCB 181R and L; CHEM 151 and 152</td>
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<td>SNRE Requirement</td>
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<td>Oral or Media Communication: ALC 422, COMM 113, COMM 119, JOUR 455, JOUR 472, SBE 202, SCI 401, RNR 495A</td>
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Diversity Emphasis: One general education course must have the non-Western Civilization, Gender, Race, Class, Ethnicity designation
2nd semester language proficiency required

Catalog Year 2018-19
**CONSERVATION BIOLOGY COURSE SELECTIONS**

**Natural Resource Management**
- RA M 446 – Management and Restoration of Wildland Vegetation (4)
- RNR 441A – Nat Res Management in Native American Communities (3)
- WFSC 444 – Wildlife Management (4)
- WFSC 445 – Population Ecology (3)
- WFSC 455R and L – Fishery Management (4)
- WS M 462 – Watershed Management (4)

**Organismal Biology**
- RAM 382 -- Rangeland Plant Communities
- ECOL 472 -- Systematic Botany (4)
- ECOL 475 -- Freshwater and Marine Algae (4)
- ECOL 482 -- Ichthyology (4)
- ECOL 483 -- Herpetology (4)
- ECOL 484 -- Ornithology (4)
- ECOL 485 -- Mammalogy (4)
- ENTO 405 -- Aquatic Entomology (4)
- ENTO 415R -- Insect Biology (3)
- MIC 329A Microbial Diversity (3)

**Social Dimensions**
- RNR 440 - Climate Change Adaptation
- RNR 448 Conservation Planning and Recreation (3)
- RNR 472—Environmental Land Use Planning (3)
- RNR 485 – Economic and Social Connections to Nat Resources (3)
- AREC 217 -- Resources and Environmental Econ (3)
- GEOG 404 – The Politics of Nature
- ANTH 307 -- Ecological Anthropology (3)
- HIST 355 -- U.S. Environmental History (3)
- PA 481 -- Environmental Policy (3)

**Environment**
- GEOS 251- Geology (4)
- RNR 458 -- Ecosystem Ecology (3)
- WS M 460A -- Watershed Hydrology (4)
- WS M 468 -- Wildland Water Quality (3)
- GEOG 430 -- The Climate System (3)
- GEOS 478 -- Global Change (3)
- SWES 200 -- Soils (3)
- SWES 201 -- Soils Laboratory (1)

**Marine Sciences Minor courses**
- ECOL 496O - Galapagos Marine Ecology
- GEOS 212 Introduction to Oceanography
- ENVS 475 - Freshwater and Marine Algae
- ECOL 404R and L Biology of the Oceans (Fall)
- ECOL 412A and B Ocean Sciences
- ECOL 360 Marine Ecology and Conservation
- ECOL 450 Marine Discovery

**Other Electives**
- ECOL 401 -- Teaching Biology (2)
- ECOL 450 -- Marine Discovery (4)
- ECOL 464—Sonoran Desert Discovery (3)
- ENTO 407—Insect Discovery (3)
- RNR 495xx -Study Abroad (Namibia, Ecuador, Mex, Nepal, plus)
- RAM 436A—Grazing Ecology and Management (2)
- RNR 355 -- Introduction to Wildland Fire (3)
- RNR 438 -- Fire Ecology (3)
- WFSC 471 – Stream Ecology (3)
- WFSC 430—Conservation Genetics (3)
- AREC 373 – Environmental Economics (3)
- ECOL 335—Evolution (3)
- ECOL 426 -- Population Genetics (3)
- GEOG 438—Biogeography (3)
- ANTH 469 -- Ethnobotany (3)
- AREC 476 -- Environmental Law and Economics (3)
- SWES 461 -- Soil and Water Conservation (3)
- ACBS 403R -- Biology of Animal Parasites (3)
- ENVS 310 Ecosystem Health and Justice
- ENVS 300 Soil Ecology and Sustainable Systems
- WFSC 447- Wildlife Conservation Behavior
- WFSC 385 – Zoo and Aquarium Conservation

**Consider an Undergraduate Certificate in:**
- Rangeland Management
- Geographic Information Systems
- Zoo and Aquarium Conservation
- International Environmental Conservation