### General Education Requirements

#### English Composition
- ENGL 101 and ENGL 102  
  3 3
- OR ENGL 106, 107 and 108  
  3 3 3
- OR ENGL 109H  
  3

#### 2nd Language
(2nd semester proficiency by credit or exam; C or better)

#### Tier I
- Individuals and Societies: Select 2 courses from 150s
  3
- Traditions and Cultures: Select 2 courses from 160s
  3

#### NOTE: you do not need any 170A, B, C courses

#### Tier II
- Art or Humanities

#### Diversity requirement:
One general education course must have the non-Western Civilization, Gender, Race, Class, Ethnicity designation. Some Tier 1 and Tier II courses also satisfy this requirement

### Natural Resources Core Courses (18 units)
- RNR 200: Conservation of Natural Environments (Fall/Sum)  
  3
- RNR 230R/L: Field Botany (Lab is Fall only)  
  2 1
- RNR 316: Natural Resources Ecology (Fall/Spring)  
  3
- RNR 321: Ecological Surveys and Sampling (Fall/Spring)  
  3
- RNR 384: Natural Resources Management Practices (Spring)  
  3
- RNR 480: Natural Resources Policy and Law (Spring)  
  3

### Core Themes (13 units)
select one course from each area

#### Math
- MATH 113 OR MATH 122B OR MATH 125  
  3 or 5

#### Technical Skills:
- RNR 403, RNR 417, GEOG 330,  
  3
- RNR 429, RAM 456A, RAM 446

#### Technical Writing:
- ENGL 308, ENGL 313, ENGL 340,  
  3
- ENGL 414, ENV S 408, ENV S 415

#### Oral or Media Communication:
- ALC 422, COMM 119,  
  3
- COMM 113, JOUR 455, JOUR 472, RNR 495A, SBE 202, SCI 401

#### SNRE requirement
  1

### Option Specific Courses (27-28 units)

#### Genetics
- PLS 312 OR ECOL 320/H  
  4
- ECOL 406R Conservation Biology (Spring)  
  3

#### Natural Resources Management (select 1)
  3 or 4

#### Ogranismal Biology (select 2)
  4

#### Social Dimensions (select 1)
  3

#### Environment (select 1)
  3 or 4

### Supporting Coursework (22 units)

#### Statistics:
- MATH 163 or 263, OR PSY 230 OR SBS 200  
  3

#### Economics:
- *ECON 200  
  3

- *If you count ECON 200 towards your Tier II Indiv, substitute a technical elective

#### General Chemistry:
- CHEM 151 AND CHEM 152  
  4 4

#### General Biology:
- MCB 181R/L: Intro Biol I  
  4
- ECOL 182R/L: Intro Biol II  
  4

### Graduation Requirements
- at least 120 units
- 42 upper division units
- 30 or more units completed at the UA
- at least a 2.0 major and cumulative GPA,
- Mid-career writing assessment fulfilled with a B or higher in English Composition OR with Technical Writing requirement.
# 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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
<td></td>
<td><strong>Freshman</strong></td>
<td></td>
<td></td>
</tr>
<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>
<td>4</td>
<td>1st semester Chemistry</td>
</tr>
<tr>
<td>ENGL 101 or 109H</td>
<td>3</td>
<td></td>
<td>ENGL 102</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Tier 1 Traditions and Cultures</td>
<td>3</td>
<td></td>
<td>ECOL 182R and L General Biology Lecture and Lab</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RNR 200 Conservation of Natural Environments</td>
<td>3</td>
<td></td>
<td>Calcuus: MATH 113, 122B, or 125 (Calculus)</td>
<td>3</td>
<td>MATH 112 or placement test</td>
</tr>
<tr>
<td>Tier 1 Individuals and Societies</td>
<td>3</td>
<td></td>
<td>Tier 1 Individuals and Societies</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>TOTAL</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 2 Individuals and Societies</td>
<td>3</td>
<td></td>
<td>Tier 2 Arts or Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RNR 316 Natural Resources Ecology</td>
<td>3</td>
<td>ECOL 182R and L, RNR 230R</td>
<td>Tier 1 Traditions and Cultures</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Statistics: MATH 163 or 263, or PSY 230, or SBS 200</td>
<td>3</td>
<td>MATH 112 or placement</td>
<td>ECON 200</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RNR 230R and 230L Field Botany</td>
<td>3</td>
<td></td>
<td>Technical Writing: ENGL 308, 313, 340, or 414, ENVS 408 or 415</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MCB 181R and L General Biology Lecture and Lab</td>
<td>4</td>
<td>MATH 112 or placement; CHEM 151</td>
<td>RNR 384 Natural Resources Management Practices</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>TOTAL</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td></td>
<td></td>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Resources Management course (see list)</td>
<td>4</td>
<td>RNR 316 recommended</td>
<td>ECOL 406R: Conservation Biology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Organismal Biology Course (see list)</td>
<td>4</td>
<td></td>
<td>Technical Electives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Environment Elective</td>
<td>3/4</td>
<td></td>
<td>Organismal Biology Course (see list)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td></td>
<td>TOTAL</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Dimensions course (see list)</td>
<td>3</td>
<td></td>
<td>PLS 312 or ECOL 320 Genetics</td>
<td>4</td>
<td>MCB 181R and L; CHEM 151 and 152</td>
</tr>
<tr>
<td>SNRE Requirement</td>
<td>1</td>
<td></td>
<td>Natural or Media Communication: ALL 422, COMM 113,</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>COMM 119, JOUR 455, JOUR 472, SBE 202, SCI 401, RNR 495A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Electives</td>
<td>12</td>
<td></td>
<td>Technical Electives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td></td>
<td>TOTAL</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>RNR 480 Natural Resources Policy and Law</td>
<td>3</td>
<td></td>
<td>RNR 200</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Diversity Emphasis: One general education course must have the non-Western Civilization, Gender, Race, Class, Ethnicity designation
2nd semester language proficiency required
Catalog Year 2020-2021
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 Ecology, Conservation and Management (4)
WFSC 445 – Population Ecology (3)
WFSC 455R and L – Fishery Management (4)
WS M 462 – Watershed Management (4)

Organismal Biology
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 429 Ecosystem Climatology (3)
RNR 458 – Ecosystem Ecology (3)
WSM 452 – Vegetation Dynamics and Dryland Ecohydrology
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)

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 338 – 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