### Ecosystems Specialization – BA (major code 363)

*for majors declared Fall 2021 onwards*

- Courses can only be used to fulfill one requirement, even if the course is listed as an option for multiple requirements.
- Many upper level courses have prerequisites. Make sure you plan accordingly for the path you want to take.

<table>
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<tr>
<th>Requirement</th>
<th>Course options</th>
<th>Credits</th>
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</table>
| A. ENVI 101 – Humans & Ecological Environment | - ENVI 101  
- AP Envi Exam score of 3, 4, or 5  
- ENVI 105 - People, Politics, & Environment (Source Project Students only)  
- PLSC 180A - People, Politics, & Environment (Source Project Students only) | 4 |
| B. ENVI 201 – Humans & Physical Environ. | - ENVI 201  
- or AP Envi Exam score of 5 (excludes AP test taken in 2020) | 4 |
| C. One of the following lower-level Environ-mental policy courses | - ENVI/PHIL 149 Environmental Ethics  
- ENVI/GEOG 239 Envi Plng & Policy  
- ENVI 280B Intro Int’l Envi Policy (Starting in Fall 2024, this course will be renumbered to ENVI 225.)  
- PLSC 282 Intro to Environmental Policy | 4 |
| D. One lower-level economics courses | - ECON 160 Microeconomics  
- ECON 162 Macroeconomics | 4 |
| E. One introductory methods course | - GEOG 160 or 260 or 360 GIS/Spatial Analysis  
- MATH 147 Statistics  
- MATH 148 Statistics for Biologists | 4 |

The following classes are only for FRI and Source Project students:
- BIOL 241 Ecological Genetics FRI  
- ENVI 205 People Politics & Environ II  
- PLSC ??? People Politics & Environ II  
- ENVI 206 Geospatial Sensing FRI  
- ENVI/GEO 234 Biogeochemistry FRI

| F. One lower-level course related to environmental science | Either course sequence is recommended as it provides the necessary prerequisites for some upper-level courses.  
- ENVI 140 Intro Enviro Chem (Lec) + CHEM 106 (Lab)  
- CHEM 104 General Chem I (Lec) + CHEM 106 (Lab) | 4 |

Allowed
- BIOL 113 Intro to Cell & Microbiol, pre-req  
- BIOL 105 Evol for Everyone  
- ENVI 250 Farm to Table  
- ENVI 236/ANTH 236 Farming Thru Time  
- GEOL 111 Planet Earth  
- GEOL 112 Oceanography  
- GEOL 115 Global Change: Geol Perspt  
- GEOL 116 Geological Hazards  
- ENVI/GEO 170 Environmental Geology  
- GEOG 120 Weather & Climate  
- GEOG 221 Global Climate Change

| G. One lower-level ecosystems course | - BIOL 114 Intro Organisms & Population Bio | 4 |
### H. One upper-level course in ecology
- BIOL 355 Ecology
- BIOL 373 Ecol Prin & Applications
(Only one of these can count in the major. The other may not be used elsewhere.)

### I. Four upper-level courses totally 16 credits in ecosystems (BIOL, GEOG, ENVI, or other related fields)
- ANTH 470 Paleoethnobotony
- ANTH 479 Archeology of Domestication
- BIOL 341 Ecological Genetics II FRI, if course topic is related to ecosystems
- BIOL 351 Mechanisms of Evolution
- BIOL 352 Marine Biology
- BIOL 370 Botany
- BIOL 371 Zoology
- BIOL 375 Animal Behavior
- BIOL 379/ENVI 357 Biol & Conserv of Birds
- BIOL 421 Microbiol Lab
- BIOL 441 Molecular Ecol Lab
- BIOL 442 Mycology
- BIOL 455 Prin of Ecosyst Eco
- BIOL 459 Biogeography
- BIOL 470/ENVI 430 Plant Ecology
- BIOL 472 Tropical Ecol & Conserv
- BIOL 473 Ecology Lab (** two credits)
- BIOL 475 Entomology
- BIOL 476 Population Ecol
- BIOL 477 Conservation Biol
- ENVI 306 Envi Visualizations FRI, if course topic is related to ecosystems
- ENVI 322 Plants & People (** two credits)
- ENVI 324 Urban Ecology
- ENVI 325 Ecological Agriculture
- ENVI 327 N’tl Hist Nature Preserve
- ENVI 329 Ecology of Northeast
- ENVI/GEOL 334 Biogeochem FRI, if course topic is related to ecosystems
- ENVI 336 Sweet Harvests: Bees & Maples
- ENVI 382G Ecosystems of Global Health
- ENVI 382J Natural Resource Equity in Global South (Starting in Fall 2024, this course will be renumbered to ENVI 341 and renamed Intl Conservation & Development)
- ENVI 382U Food Energy Water Nexus
- ENVI/GEOG 423 Soils
- ENVI 435 Local & Global Agriculture
- ENVI 438 AgriBiotec: Sci, Pol & Conflict
- ENVI 454 ENVI applications in GIS, if student’s course project is related to ecosystems
- ENVI 481F Indigenous Knowledge Systems (Starting in Fall 2024, this course will be renumbered to ENVI 470)
- ENVI 481D Forest Ecosystems & Conservation
- ENVI 481H Climate Sustainability & Trauma
- ENVI 481W Env Comm: Nat of People & Place
### J. One upper-level research, teaching, and/or applied course in Ecosystems

- BIOL 455 Prin of Ecosyst Ecol
- BIOL 470/ENVI 430 Plant Ecology
- BIOL 472 Tropical Ecol & Conserv
- BIOL 476 Population Ecol
- BIOL 477 Conservation Biol
- ENVI 382U Food Energy Water Nexus
- ENVI 481D Forest Ecosystems & Conservation

The following may be appropriate, but require department permission.
- ENVI 397 Independent Study
- ENVI 491 Undergraduate Teaching
- ENVI 495 Environ Internship

### K. One upper-level capstone course

- ENVI 413 Environ Studies Capstone
- ENVI 382F Integrating Sustain. Science & Innovation

The following require department permission.
- ENVI 498 Senior Thesis
- ENVI 499 Honors Thesis

**Total Credits: 56**