



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.

Requirement	Course options	Credits
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 Environmental 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 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/GEOL 234 Biogeochemistry FRI	4
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) 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/GEOL 170 Environmental Geology - GEOG 120 Weather & Climate - GEOG 221 Global Climate Change	4
G. One lower-level ecosystems course	- BIOL 114 Intro Organisms & Population Bio	4

H. One upper-level course in ecology	<ul style="list-style-type: none"> - BIOL 355 Ecology - BIOL 373 Ecol Prin & Applications <p>(Only one of these can count in the major. The other may not be used elsewhere.)</p>	4
I. Four upper-level courses totally 16 credits in ecosystems (BIOL, GEOG, ENVI, or other related fields)	<ul style="list-style-type: none"> - ANTH 470 Paleoethnobotany - 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 AgriBiotech: 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 	16

J. One upper-level research, teaching, and /or applied course in Ecosystems	<ul style="list-style-type: none"> - 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 <p>The following may be appropriate, but require department permission.</p> <ul style="list-style-type: none"> - ENVI 397 Independent Study - ENVI 491 Undergraduate Teaching - ENVI 495 Environ Internship 	4
K. One upper-level capstone course	<ul style="list-style-type: none"> - ENVI 413 Environ Studies Capstone - ENVI 382F Integrating Sustain. Science & Innovation <p>The following require department permission.</p> <ul style="list-style-type: none"> - ENVI 498 Senior Thesis - ENVI 499 Honors Thesis 	4
	Total Credits: 56	