

**ENVS Ecology and Conservation (ECO) BS Track Requirements**  
Fall 2023 Update – Courses listed are REGULARLY offered

**FOUNDATION COURSES:** *All required*

ENVS 130\*: Environmental Sciences

ENVS 131\*\*: Intro to ENVS Field Studies

ENVS 390: Seminar in Environmental Issues (taken JR or SR year)

\*ENVS 120 or ENVS 140 may be substituted for ENVS 130

\*\*ENVS\_OX 131 fulfills the requirement of both ENVS 130 and ENVS 131

**INTERMEDIATE BREADTH REQUIREMENTS:** *Four courses, one from each area below*

Methods (pre-requisite for all: QTM 100)

ENVS 250: Fundamentals of Cartography & GIS

ENVS 260: Quantitative Methods in ENVS

ENVS 270: Environmental Data Science

Ecology, Conservation, and Health

ENVS 232: Fundamentals of Ecology w/lab

ENVS 240 or ENVS 240 w/lab: Ecosystem Ecology

ENVS/BIOL 247: Ecology

Earth and Atmospheric Sciences

ENVS 222: Evolution of the Earth w/lab

ENVS 229: Atmospheric Science w/lab

ENVS 239: Physical Oceanography

ENVS 245: Fundamentals in Soil Science

Social Science and Policy

ENVS 224: Economy and the Environment

ENVS 225: Institutions and the Environment

ENVS/POLS 227: Environmental Policy

**ADVANCED SPECIALIZATION ELECTIVES:** *Must take 4 from list below, with 2 or more at the 300+ level, plus one additional 3+ credit elective course in the department for a total of 5 electives*

Note: 2 courses from Intermediate Breadth and/or Advanced Specialization Categories must be field and/or lab courses.

ECO Track Advanced Specialization Electives

ENVS 232: Fundamentals of Ecology with Lab

ENVS 234: Biophilic and Green Design

ENVS 240/240L: Ecosystem Ecology (with optional lab)

ENVS 241+242: Modern and Ancient Tropical Environments (and field)

ENVS 247/247L: Ecology (with optional lab)

ENVS 250: Fundamentals of Cartography & GIS  
ENVS 255W: Environmental Communication  
ENVS 260: Quantitative Methods in ENVS  
ENVS 270: Environmental Data Science  
ENVS 323: Sustainable Food Systems  
ENVS 333: Environmental Biogeochemistry  
ENVS 341: Field Botany  
ENVS 345/545: Conservation Biology  
ENVS 349: Ecology of Invasions  
ENVS 359/559: Ecology & Evolution of Disease  
ENVS 366: Population Ecology  
ENVS 371+372: Ecology of the Tropics (and field)  
ENVS 373: Marine Ecology  
ENVS 420: Law and Biodiversity  
ENVS 442/442L: Ecology of Emory University with lab  
ENVS 446: Field Studies in Southern Africa  
ENVS 459/569: Urban Ecology & Development  
ENVS 483/583: Spatial Analysis in Disease Ecology

*Pre-approved Special Topics:* Approved special topics are posted on the ENVS web site each semester.

*Other special topics, study abroad, or 3-credit ENVS 399 courses may count for advanced specialization options with prior approval*

**INDEPENDENT STUDY REQUIREMENT:** *Choose one, must be at least 4 credit hours*

ENVS 491: Environmental Sciences Practicum  
ENVS 494: Individual Research  
ENVS 495: Honors Research  
ENVS 497: Undergraduate Internship  
ENVS 498: Individual Directed Reading  
ENVS 499: Advanced Independent Research

**CAPSTONE REQUIREMENT:** *1 credit course in final semester*

ENVS 490: ENVS Senior Capstone Portfolio

**EXTERNAL BS REQUIREMENTS: 4 courses**

*Must take at least one natural science and one quantitative science, with two additional electives from list. One of the four courses must include a lab or lab pair.*

<u>Natural Science</u>	<u>Quantitative Science</u>
<p><b>Biology</b> BIOL 141: Foundations of Modern Bio I (w/ 141L) BIOL 142: Foundations of Modern Bio II (w/ 142L) BIOL 241: Evolutionary Biology BIOL 320: Animal Behavior BIOL 329: Coastal Biology w/ Lab BIOL 347: Disease Ecology BIOL 380: Herpetology</p> <p><b>Chemistry</b> CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules</p>	<p><b>Mathematics</b> MATH 111: Calc I MATH 112: Calc II (or 112Z) MATH 116: Life Sciences Calculus II MATH 210: Adv. Calc for Data Sciences MATH 221: Linear Algebra</p> <p><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis QTM 210: Probability and Statistics QTM 250: Data Science Computing QTM 315: Game Theory QTM 325: Evolutionary Game Theory QTM 446: Big/Small Data and Visualization QTM 491: Design/Analysis Experiments</p>