

ENVS Ecology and Conservation (ECO) BS Track Requirements
Effective Fall 2020

FOUNDATION COURSES: *All required*

ENVS 130*: Environmental Sciences
ENVS 131**: Intro to ENVS Field Studies
ENVS 390: Seminar in Environmental Issues

*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 230: Introductory Geoscience w/lab
ENVS 235: Environmental Geology
ENVS 239: Physical Oceanography

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 320: Environmental Assessment/Management
ENVS 323: Sustainable Food Systems
ENVS 329: Religion and Ecology
ENVS 340: Wetland Ecology
ENVS 341: Field Botany
ENVS 345: Conservation Biology
ENVS 349: Ecology of Invasions
ENVS 359: Ecology & Evolution of Disease
ENVS 361: Ecosystems Through Time
ENVS 366: Population Ecology
ENVS 371+372: Ecology of the Tropics (and field)
ENVS 373: Marine Ecology
ENVS 375: Tropical Marine Ecosystems (abroad)
ENVS 420: Law and Biodiversity
ENVS 442/442L: Ecology of Emory University with lab
ENVS 443: Ecosystems of Georgia
ENVS 444: Ecosystems: SE U.S. with Lab
ENVS 446: Field Studies in Southern Africa
ENVS 459: Urban Ecology & Development
ENVS 460: Research Design and Practice
ENVS 483: Spatial Analysis in Disease Ecology
ENVS 500: Spatial and Landscape Ecology
ENVS 542: Ecological Mutualisms
ENVS 545: Conservation Biology
ENVS 559: Ecology & Evolution of Disease
ENVS 560: Research Design & Practice in Environmental Sciences
ENVS 569: Urban Ecology and Development
ENVS 580: Primate Disease Ecology
ENVS 581: Environmental Disease Ecology
ENVS 583: Spatial Analysis in Disease Ecology

Pre-approved Special Topics: Agroecology, Vector Ecology and Control

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: Service Learning in ENVS
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 course must also be a lab or lab pair.

<u>Natural Science</u>	<u>Quantitative Science</u>
<p>Biology BIOL 141: Foundations of Modern Bio I (w/ 141L) BIOL 142: Foundations of Modern Biol 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>Chemistry CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules</p>	<p>Mathematics MATH 111: Calc I (or 111L) 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>Quantitative Theory and Methods QTM 210: Probability and Statistics QTM 220: Regression Analysis QTM 315: Game Theory QTM 345: Advanced Statistics QTM 355: Introduction to Time Series Analysis QTM 360: Generalized Linear Models QTM 446: Big/Small Data and Visualization QTM 491: Design/Analysis Experiments</p>