## ENVS Ecology and Conservation (ECO) BS Track Requirements
### Spring 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 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.

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