NVS Ecology and Conservation (ECO) BS Track Requirements
Spring 2024 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 (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 235: Environmental Geology
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 380: Herpetology
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.

Natural Science	**Quantitative Science**
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 **Chemistry** CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) or CHEM 202Z/202ZL CHEM 203: Advanced Reactivity CHEM 204: Macromolecules	**Mathematics** 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 **Quantitative Theory and Methods** 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