Integrative Science-Environmental Science Advising Track

LEVEL 1: Building a Scientific Foundation (16 Credits)  
Student would choose either a Chemistry or Biology track at the foundation level, depending on which upper-division courses the student plans to take. However, students are welcome and encouraged to take both the Chemistry and Biology introductory sequences if able.

___ ENVR 175 Earth Systems Science (4)
___ ENVR 275 Humans and the Environment (4)

Plus, one of the following sets of coursework:

___ BIOL 101 Foundations of Biology (4) fall
___ BIOL 201 Intermediate Cell Biology and Genetics (4) spring
___ BIOL 202 Evolution in Action (4)

OR

___ CHEM 125 Introduction to Chemical Structure and Properties (4) and CHEM 201 Purification and Separation Lab I (0-1)
___ CHEM 250 Reactivity I (4) and CHEM 202 Purification and Chromatography Lab II (0-1)
___ CHEM 255 Fundamentals of Macroscopic Chemical Analysis (4) and CHEM 205 Chemical Measurement Lab (0-1)

___ MATH 124 Statistics is also recommended

Note: Most strongly recommended coursework

___ ENV 300Q Environmental Health (4) fall
___ ENV 333 Sustainable Agriculture (4) fall
___ ENV 311 Introduction to Geographic Information Systems (4) spring
___ ENV 331 Science of Climate Changes (4) spring
___ **BIOL 334 General Ecology (4) (BIOL 101, 201, 202 or ENVR 175, 275) fall
___ **BIOL 337 Aquatic Ecology (4) (BIOL 101, 201, 202 or ENVR 175, 275) fall
___ BIOL 308 Plant Systematics (4) (BIOL 101, 201 or 202) fall
___ BIOL 327 Plant Physiology (4) (BIOL 101, 201) spring
___ BIOL 322 Developmental Biology (4) (BIOL 101, 201) fall
___ BIOL 323 Animal Physiology (4) (BIOL 101, 201) fall
___ BIOL 332 Natural History of Terrestrial Vertebrates (4) (BIOL 101, 201, 202) spring
___ BIOL 336 Behavioral Ecology (4) (BIOL 101, 201, 202 or ENVR 175) typically spring
___ **CHEM 343 Climate and Habitat Change (2) (CHEM 125, CHEM 250, CHEM 255) spring every year
___ **CHEM 344 Environmental Chemistry: Atmosphere (2) or **CHEM 344B Environmental Chemistry: Lithosphere/Hydrosphere (CHEM 125, 250, 255, 343) spring *A and B offered alternating years
___ CHEM 348A Molecular Design—Inorganic (2) (CHEM 125, 251, CHEM 315) fall even years
___ CHEM 354 Sustainable Energy (2) (CHEM 125, 250, 255) spring even years
___ CHEM 356 Instrumental Design and Technology (2) (CHEM 125, 255) fall even years
___ CHEM 357 Separation Science (2) (CHEM 125, 255) fall odd years
___ CHEM 361 Insights into Mechanistic Determination (2) (CHEM 125, 250, 255, and CHEM 315 as pre- or co-requisite) spring odd years

Note: No more than 12 credits from any one department

**indicates most strongly recommended coursework

LEVEL 3a: Building Depth and Breadth: Upper Division Natural Science courses (20 Credits with no more than 12 credits from one academic department)  
Course prerequisites are bracketed at the right, followed by the semester the course is typically offered. Please note that it is the student’s responsibility to make sure all prerequisites are complete prior to enrolling in upper division coursework.

___ **ENV 300Q Environmental Health (4) fall
___ **ENV 333 Sustainable Agriculture (4) fall
___ **ENV 311 Introduction to Geographic Information Systems (4) spring
___ **ENV 331 Science of Climate Changes (4) spring
___ **BIOL 334 General Ecology (4) (BIOL 101, 201, 202 or ENVR 175, 275) fall
___ **BIOL 337 Aquatic Ecology (4) (BIOL 101, 201, 202 or ENVR 175, 275) fall
___ BIOL 308 Plant Systematics (4) (BIOL 101, 201 or 202) fall
___ BIOL 327 Plant Physiology (4) (BIOL 101, 201) spring
___ BIOL 322 Developmental Biology (4) (BIOL 101, 201) fall
___ BIOL 323 Animal Physiology (4) (BIOL 101, 201) fall
___ BIOL 332 Natural History of Terrestrial Vertebrates (4) (BIOL 101, 201, 202) spring
___ BIOL 336 Behavioral Ecology (4) (BIOL 101, 201, 202 or ENVR 175) typically spring
___ **CHEM 343 Climate and Habitat Change (2) (CHEM 125, CHEM 250, CHEM 255) spring every year
___ **CHEM 344 Environmental Chemistry: Atmosphere (2) or **CHEM 344B Environmental Chemistry: Lithosphere/Hydrosphere (CHEM 125, 250, 255, 343) spring *A and B offered alternating years
___ CHEM 348A Molecular Design—Inorganic (2) (CHEM 125, 251, CHEM 315) fall even years
___ CHEM 354 Sustainable Energy (2) (CHEM 125, 250, 255) spring even years
___ CHEM 356 Instrumental Design and Technology (2) (CHEM 125, 255) fall even years
___ CHEM 357 Separation Science (2) (CHEM 125, 255) fall odd years
___ CHEM 361 Insights into Mechanistic Determination (2) (CHEM 125, 250, 255, and CHEM 315 as pre- or co-requisite) spring odd years

Note: No more than 12 credits from any one department

**indicates most strongly recommended coursework

LEVEL 3b: Additional upper Division Courses (8 credits: can be Natural Science coursework and/or courses outside the Natural Sciences)

___ Any upper division Natural Science Course
___ Any upper division Natural Science Course
___ Any upper division ENVR Course
___ Any upper division ENVR Course
___ COMM 309 Environmental Rhetoric
___ ECON 318 Natural Resource/Environmental Economics
___ HIST 360 U.S. Environmental History
___ PCST 354 Global Environmental Politics
___ PHIL 322 Environmental Ethics
___ POLS 330 Environmental Politics/Policy

LEVEL 4: Second Integration Point (2 Credits)

___ ISCI 301 Integrative Science II (2) fall

LEVEL 5: Integration Science Capstone (4 Credits)

___ ISCI 378 (4) spring

* No more than 12 credits can be counted toward another major or minor.
## Common Curriculum requirements:

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- FYS I & FYS II
- ES
- EL
- Theo 111
- FA
- HM & HM (different departments)
- FAE
- GL 111, 112, 211
- GE
- IC
- TU
- NS
- MT
- SS