

ENVS Bachelor of Science (BS) Major Requirements
Effective Fall 2020

Track Options: Must choose 1 track concentration for the BS

- Ecology and Conservation (ECO)
- Earth and Atmospheric Sciences (EAS)
- Social Science and Policy (SSP)
- Environment and Health (EVH)

Foundational Courses:

Introductory Lecture Course (take 1): ENVS 120 (recommended for EAS/SSP tracks)/ENVS 130 (rec'd for ECO)/ENVS 140 (rec'd for EVH)

*These are the recommended intro courses for each track but can be substituted for each other

Introductory Field Course: ENVS 131

Seminar: ENVS 390

Intermediate Breadth Courses:

Must take 4 courses, one from each column in Table A

TABLE A: INTERMEDIATE BREADTH COURSES *Take 1 course from each column*

METHODS *note QTM100 pre-requisite for all	ECO / EVH	EAS	SSP
ENVS 250	ENVS 232	ENVS 222	ENVS 224
ENVS 260	ENVS 240/240L	ENVS 229	ENVS 225
ENVS 270	ENVS 247/247L	ENVS 230	ENVS 227
		ENVS 235	
		ENVS 239	

Advanced Specialization Electives: Must take 4 from appropriate track column in Table B with 2 or more at the 300+ level, plus one additional elective course in the department for a total of 5 electives

TABLE B: ADVANCED SPECIALIZATION ELECTIVES *Take 4 from your declared track (with 2 or more at 300+ level), plus one more departmental elective.*

ECO Track	EAS Track	SSP Track	EVH Track
ENVS 232	ENVS 215W	ENVS 224	ENVS 232
ENVS 234	ENVS 222	ENVS 225	ENVS 240/240L
ENVS 240/240L	ENVS 229	ENVS 227	ENVS 247/247L
ENVS 241+242	ENVS 230	ENVS 228	ENVS 250
ENVS 247/247L	ENVS 235	ENVS 250	ENVS 255W
ENVS 250	ENVS 239	ENVS 255W	ENVS 260
ENVS 255W	ENVS 241+242	ENVS 260	ENVS 270
ENVS 260	ENVS 250	ENVS 270	ENVS 321
ENVS 270	ENVS 255W	ENVS 320	ENVS 323
ENVS 320	ENVS 260	ENVS 323	ENVS 328
ENVS 323	ENVS 270	ENVS 324	ENVS 345
ENVS 329	ENVS 321	ENVS 326	ENVS 348
ENVS 340	ENVS 326	ENVS 344	ENVS 359
ENVS 341	ENVS 328	ENVS 345	ENVS 365
ENVS 345	ENVS 330	ENVS 350	ENVS 366
ENVS 349	ENVS 331	ENVS 352	ENVS 459
ENVS 359	ENVS 342	ENVS 365	ENVS 460
ENVS 361	ENVS 346	ENVS 370A	ENVS 483
ENVS 366	ENVS 347/347L	ENVS 377	ENVS 545
ENVS 371+372	ENVS 348	ENVS 420	ENVS 559
ENVS 373	ENVS 362	ENVS 426	ENVS 560
ENVS 375 (abroad)	ENVS 365	ENVS 458	ENVS 569
ENVS 420	ENVS 426	ENVS 460	ENVS 580
ENVS 442	ENVS 460	ENVS 521	ENVS 581
ENVS 443	ENVS 526	ENVS 524	ENVS 583
ENVS 444	ENVS 560	ENVS 526	
ENVS 446	ENVS 561	ENVS 560	
ENVS 459	ENVS 575	ENVS 570	
ENVS 460		ENVS 575	
ENVS 483			
ENVS 500			
ENVS 542			
ENVS 545			
ENVS 559			
ENVS 560			
ENVS 569			
ENVS 580			
ENVS 581			
ENVS 583			
<i>Pre-approved Special Topics:</i> Agroecology, Vector Ecology and Control	<i>Pre-approved Special Topics:</i> Fundamentals in Soil Science, Biogeochemistry and Env Health, Extinctions	<i>Pre-approved Special Topics:</i> Perspectives on the Anthropocene, Environmental Epidemiology, Resilience and Policy	<i>Pre-approved Special Topics:</i> Biogeochemistry and Env Health, Perspectives on the Anthropocene, Environmental Epidemiology, Vector Ecology and Control
<i>Other special topics, study abroad, or 3-credit ENVS 399 courses may count for advanced specialization options with prior approval, but at least one elective MUST be a class taken in the department.</i>			

+Upper level field/lab requirement: At least two courses taken in Intermediate Breadth or Advanced Electives must be lab or field courses

Independent Study: 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 Portfolio: ENVS 490 (1 credit, taken in graduating semester)

External BS Course Requirements: Must take at least 4 courses that meet guidelines for your track (Table C)

TABLE C: EXTERNAL COURSE REQUIREMENTS

<p>ECO Track <i>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.</i></p>	<p>EAS Track <i>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.</i></p>	<p>SSP Track <i>Must take one complete methods sequence and two additional electives. An additional methods sequence may be taken instead of 2 electives.</i></p>	<p>EVH Track <i>Must take at least one natural science and one quantitative science, with two additional electives from list. At least one course must be designated with a health-focus (+). One course must also be a lab or lab pair.</i></p>
<p><u>Natural Science</u></p> <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> <hr/> <p><u>Quantitative Science</u></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>	<p><u>Natural Science</u></p> <p>Chemistry CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules CHEM 205: Light and Matter (w/ 205L)</p> <p>Physics PHYS 141: Intro Physics I w/ Lab PHYS 142: Intro Physics II w/ Lab PHYS 151: Phys for Sci & Engin I w/ Lab PHYS 152: Phys for Sci & Engin II w/ Lab PHYS 253: Modern Physics w/ Lab PHYS 311: Astrophysics I w/ Lab PHYS 365: Electricity and Magnetism PHYS 421: Thermodynamics & Stat Physics</p> <hr/> <p><u>Quantitative Science</u></p> <p>Computer Science CS 170: Intro to Computer Science I CS 171: Intro to Computer Science II CS 224: Foundations of Computer Science</p> <p>Mathematics MATH 111: Calc I (or 111L) MATH 112: Calc II (or 112Z) MATH 210: Adv. Calc for Data Sciences MATH 211: Adv Calc (Multivariate) MATH 212: Differential Equations MATH 221: Linear Algebra</p> <p>Physics PHYS 220: Math Methods for Sci & Engin</p> <p>Quantitative Theory and Methods QTM 200: Applied Regression Analysis QTM 210: Probability and Statistics QTM 220: Regression Analysis</p>	<p><u>Methods Sequences</u></p> <p>Economics Methods Sequence: ECON 220: Introduction to Statistical Methods ECON 320: Econometrics</p> <p>Political Science Methods Sequence: POLS 208: Research Design and Methods POLS 300: Social Choice and Elections</p> <p>Quantitative Theory and Methods Sequence: QTM 110: Intro to Scientific Methods QTM 210: Probability and Statistics</p> <hr/> <p><u>Elective Courses</u></p> <p>Anthropology ANT 202: Concepts and Methods in Cultural Anthropology</p> <p>Economics ECON 101: Principles of Microeconomics ECON 112: Principles of Macroeconomics</p> <p>Mathematics MATH 111: Calc I (or 111L)</p> <p>Political Science POLS 360: Public Policy POLS 369: Policy Analysis</p> <p>Psychology PSYC 212: Social Psychology</p> <p>Sociology SOC 105: Intro Population & Human Ecology</p> <p>Quantitative Theory and Methods QTM 220: Regression Analysis QTM 315: Game Theory QTM 250: Data Science Computing QTM 360: Generalized Linear Models QTM 446: Big/Small Data and Visualization</p>	<p><u>Natural Science</u></p> <p>Anthropology ANT 230: Medical Anthropology+ ANT 334: Evolutionary Medicine+ ANT 336: Anthropology of Emerging Disease+</p> <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 347: Disease Ecology+</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>Health HLTH 207: Fundamentals of Epidemiology+ HLTH 210: Predictive Health and Society+ HLTH 250: Foundations of Global Health+ HLTH 317: Microbiome in Health and Disease+ HLTH 340: Food, Health, and Society+ HLTH 350R: Core Issues in Global Health: Under the Weather+ HLTH 385 (xxx): The Science of Integrative Health+ HLTH 440: Botanical Medicine and Health+</p> <hr/> <p><u>Quantitative Science</u></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 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>

QTM 355: Into to Time Series Analysis		
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