

**ENVS Bachelor of Science (BS) Major Requirements**  
**Effective Fall 2020 \*last updated 3/1/2024**

**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*

<b>METHODS</b> *note QTM100 pre-requisite for all	<b>ECO / EVH</b>	<b>EAS</b>	<b>SSP</b>
ENVS 250 ENVS 260 ENVS 270	ENVS 232 ENVS 240/240L ENVS 247/247L	ENVS 222 ENVS 229 ENVS 230 ENVS 235 ENVS 239 ENVS 245	ENVS 224 ENVS 225 ENVS 227

**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.*

<b>ECO Track</b>	<b>EAS Track</b>	<b>SSP Track</b>	<b>EVH Track</b>
ENVS 232 ENVS 234 ENVS 240/240L ENVS 241+242 ENVS 247/247L	ENVS 215W ENVS 222 ENVS 229 ENVS 230 ENVS 235	ENVS 210 ENVS 224 ENVS 225 ENVS 227 ENVS 228	ENVS 210 ENVS 232 ENVS 234 ENVS 240/240L ENVS 247/247L

ENVS 250	ENVS 239	ENVS 250	ENVS 250
ENVS 255W	ENVS 241+242	ENVS 255W	ENVS 255W
ENVS 260	ENVS 245	ENVS 260	ENVS 260
ENVS 270	ENVS 250	ENVS 270	ENVS 270
ENVS 320	ENVS 255W	ENVS 320	ENVS 321
ENVS 323	ENVS 260	ENVS 323	ENVS 323
ENVS 329	ENVS 270	ENVS 324	ENVS 328
ENVS 333	ENVS 326	ENVS 326	ENVS 333
ENVS 341	ENVS 328	ENVS 344	ENVS 345
ENVS 345	ENVS 330	ENVS 345	ENVS 348
ENVS 349	ENVS 331W	ENVS 350	ENVS 359
ENVS 359	ENVS 333	ENVS 352W	ENVS 365
ENVS 366	ENVS 342	ENVS 365	ENVS 366
ENVS 371+372	ENVS 346	ENVS 370A	ENVS 459
ENVS 373	ENVS 347/347L	ENVS 370B	ENVS 460
ENVS 375 (abroad)	ENVS 348	ENVS 377	ENVS 483
ENVS 380	ENVS 365	ENVS 420	ENVS 545
ENVS 420	ENVS 460	ENVS 458	ENVS 559
ENVS 442	ENVS 526	ENVS 460	ENVS 560
ENVS 443	ENVS 560	ENVS 521	ENVS 569
ENVS 444	ENVS 561	ENVS 524	ENVS 580
ENVS 446	ENVS 575	ENVS 526	ENVS 581
ENVS 459		ENVS 560	ENVS 583
ENVS 460		ENVS 570	
ENVS 483		ENVS 575	
ENVS 500			
ENVS 542			
ENVS 545			
ENVS 559			
ENVS 560			
ENVS 569			
ENVS 580			
ENVS 581			
ENVS 583			
<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: 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 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

<b>ECO Track</b>	<b>EAS Track</b>	<b>SSP Track</b>	<b>EVH Track</b>
<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>	<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>	<i>Must take one complete methods sequence and two additional electives. An additional methods sequence may be taken instead of 2 electives.</i>	<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><b><u>Natural Science</u></b></p> <p><b>Biology</b> 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</p> <p><b>Chemistry</b> CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules</p>	<p><b><u>Natural Science</u></b></p> <p><b>Chemistry</b> 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><b>Physics</b> PHYS 141: Intro Physics I w/Lab PHYS 142: Intro Physics II w/Lab PHYS 151: Phys for Sci &amp; Engin I w/ Lab PHYS 152: Phys for Sci &amp; Engin II w/ Lab PHYS 253: Modern Physics w/ Lab PHYS 311: Astrophysics I w/Lab PHYS 365: Electricity and Magnetism PHYS 421: Thermodynamics &amp; Stat Physics</p>	<p><b><u>Methods Sequences</u></b></p> <p><b>Economics Methods Sequence:</b> ECON 220: Introduction to Statistical Methods ECON 320: Econometrics</p> <p><b>Political Science Methods Sequence:</b> POLS 208: Research Design and Methods POLS 300: Social Choice and Elections <u>OR</u> POLS 360: Public Policy</p> <p><b>Quantitative Theory and Methods Sequence:</b> QTM 110: Intro to Scientific Methods QTM 200: Applied Regression Analysis</p>	<p><b><u>Natural Science</u></b></p> <p><b>Anthropology</b> ANT 230: Medical Anthropology+ ANT 334: Evolutionary Medicine+ ANT 336: Anthropology of Emerging Disease+</p> <p><b>Biology</b> 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><b>Chemistry</b> CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules</p>
<p><b><u>Quantitative Science</u></b></p> <p><b>Mathematics</b> 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><b><u>Quantitative Science</u></b></p> <p><b>Computer Science</b> CS 170: Intro to Computer Science I CS 171: Intro to Computer Science II CS 224: Foundations of Computer Science</p>	<p><b><u>Elective Courses</u></b></p> <p><b>Anthropology</b> ANT 202: Concepts and Methods in Cultural Anthropology ANT 351W: Sustainable Development</p> <p><b>Economics</b> ECON 101: Principles of Microeconomics ECON 112: Principles of Macroeconomics</p> <p><b>Sustainability</b> SUST 201: Foundations of Sustainability</p> <p><b>Mathematics</b> MATH 111: Calc I (or 111L)</p> <p><b>Political Science</b> POLS 360: Public Policy POLS 369: Policy Analysis</p> <p><b>Psychology</b> PSYC 212: Social Psychology</p> <p><b>Sociology</b> SOC 105: Intro Population &amp; Human Ecology</p> <p><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis 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><b>Health</b> 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 (343): Science of Integrative Health+ HLTH 440: Botanical Medicine and Health+</p>
<p><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis QTM 210: Probability and Statistics QTM 220: Regression Analysis QTM 250: Data Science Computing QTM 315: Game Theory QTM 325: Evolutionary 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><b>Mathematics</b> 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><b>Physics</b> PHYS 220: Math Methods for Sci &amp; Engin</p> <p><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis QTM 210: Probability and Statistics QTM 220: Regression Analysis QTM 250: Data Science Computing  QTM 355: Into to Time Series Analysis</p>	<p><b>Mathematics</b> MATH 111: Calc I (or 111L)</p> <p><b>Political Science</b> POLS 360: Public Policy POLS 369: Policy Analysis</p> <p><b>Psychology</b> PSYC 212: Social Psychology</p> <p><b>Sociology</b> SOC 105: Intro Population &amp; Human Ecology</p> <p><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis 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><b><u>Quantitative Science</u></b></p> <p><b>Mathematics</b> 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><b>Quantitative Theory and Methods</b> QTM 200: Applied Regression Analysis 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>