

## Foundations of Environmental Science

Updated 10/19/20

Definition: These courses present students with disciplinary knowledge from the natural sciences foundational to environmental science. They may or may not consider how this knowledge relates to environmental science and include courses at introductory through advanced levels.

*The list below has been sorted by department and course number.*

ANTH 100 Introduction to Biological Anthropology  
BIOL 120 Life at the Extremes: A Survival Guide  
BIOL 121 Alien Worlds  
BIOL 122 The Biochemical Basis of Metabolic Disorders  
BIOL 123 Interactions of Plants, Animals, and Fungi  
BIOL 124 Biology of Behavior  
BIOL 125 Understanding Cancer  
BIOL 126 Infectious Disease versus Immune Defense  
BIOL 127 This Is Your Life  
BIOL 131 Topics in Ecology of Animals, Plants, and Fungi  
BIOL 131 Topics in Evolution and Ecology  
BIOL 132 Introduction to Molecules, Genes, and Cells: Topics in Development  
BIOL 132 Molecules, Genes & Cells: Topics in Genetics & Genomics  
BIOL 213 Cell and Tissue Biology  
BIOL 215 Evolution  
BIOL 216 Genetics  
BIOL 221 Animal Diversity  
BIOL 313 Cell Biology  
BIOL 315 Evolution  
BIOL 318 Animal Development  
BIOL 321 Invertebrate Zoology  
BIOL 323 Algae, Fungi, and Lichens  
BIOL 326 Microbiology  
BIOL 333 Physiology  
BIOL 334 Vertebrate Biology  
BIOL 342 Structure & Function of Biomolecules w/Lab  
BIOL 343 Metabolism  
BIOL 380 Immunology  
BIOL 401 Field Natural History Mosaic  
BIOL 416 Population Genetics  
BIOL 417 Molecular Genetics  
BIOL 425 Biology of Cancer

CHEM 131 General Chemistry I  
CHEM 132 General Chemistry II  
CHEM 141 Accelerated General Chemistry  
CHEM 241 Organic Chemistry I  
CHEM 242 Organic Chemistry II  
CHEM 244 Thermodynamics and Kinetics  
CHEM 342 Structure and Function of Biomolecules  
CHEM 343 Metabolism  
CHEM 347 Concepts of Inorganic Chemistry

COMP 130 Introduction to Computing  
COMP 131 Introduction to Computer Science  
COMP 132 Introduction to Computer Science II  
COMP 132 Principles of Object Oriented Design

ENST 218/ERSC 218/ARCH 218 Geographic Information Systems

ERSC 121 Are We Alone Understanding Habitable Worlds  
ERSC 141 Earth's Hazards  
ERSC 142 Earth's Changing Climate  
ERSC 151 Foundations of Earth Science  
ERSC 201 Surface Processes  
ERSC 205 Introduction to Soil Sciences  
ERSC 206 Volcanology  
ERSC 221 Oceanography  
ERSC 301 Field Geology  
ERSC 305 Earth Materials  
ERSC 306 Igneous and Metamorphic Petrology  
ERSC 307 Paleontology  
ERSC 309 Sedimentology and Stratigraphy  
ERSC 321 Isotope Geochemistry  
ERSC 331 Chemistry of Earth Systems  
ERSC 333 Environmental Geophysics  
ERSC 335 Global Geophysics & Tectonics

MATH 121 Elementary Statistics  
MATH 151 Introduction to Calculus  
MATH 170 Single-Variable Calculus  
MATH 171 Multivariate Calculus  
MATH 211 Discrete Mathematics  
MATH 225 Probability and Statistics 1  
MATH 241 Numerical Methods  
MATH 262 Introduction to Linear Algebra  
MATH 270 Integration and Infinite Series

MATH 271 Differential Equations  
MATH 325 Probability and Statistics II  
MATH 331/COMP 331 Operations Research

PHYS 131 Introductory Physics  
PHYS 132 Introductory Physics  
PHYS 141 Physics for the Life Sciences  
PHYS 142 Physics for the Life Sciences