

FOUNDATIONS OF ENVIRONMENTAL SCIENCE (ESFN)

Updated 10/30/2023

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.

ARCH 218 Geographic Information Systems

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 Ocean Ecology (formerly BIOL 129 changing Ocean Ecosystems)

BIOL 131 Field Natural History

BIOL 131 Topics in Ecology of Animals, Plants, and Fungi

BIOL 131 Topics in Evolution and Ecology

BIOL 131 Introduction to Organisms, Populations, and Ecosystems: The Physiology of Life

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 w Lab

BIOL 221 Animal Diversity

BIOL 313 Cell Biology w Lab

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 w Lab

BIOL 342 Structure & Function of Biomolecules w Lab

BIOL 343 Metabolism

BIOL 380 Immunology

BIOL 401 Field Natural History Mosaic

BIOL 416 Population Genetics

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CHEM 131 General Chemistry I
CHEM 132 General Chemistry II w Lab
CHEM 141 Accelerated General Chemistry
CHEM 241 Organic Chemistry I
CHEM 242 Organic Chemistry II w Lab
CHEM 244 Thermodynamics and Kinetics
CHEM 342 Structure and Function of Biomolecules w Lab
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
COMP 180 Introduction to Data Science
COMP 241 Computational Mathematics

DATA 180 Introduction to Data Science

ENST 218/GEOS 218/ARCH 218 Geographic Information Systems

GEOS 121 Are We Alone Understanding Habitable Worlds
GEOS 141 Earth's Hazards
GEOS 142 Earth's Changing Climate
GEOS 151 Foundations of Earth Science
GEOS 201 Surface Processes
GEOS 205 Introduction to Soil Sciences
GEOS 206 Volcanology
GEOS 218 Geographic Information Systems
GEOS 221 Oceanography
GEOS 301 Field Geology
GEOS 305 Earth Materials
GEOS 306 Igneous and Metamorphic Petrology
GEOS 307 Paleontology
GEOS 309 Sedimentology and Stratigraphy
GEOS 310 Introduction to Geographical Information Systems for Field Scientists
GEOS 321 Isotope Geochemistry
GEOS 331 Geochemistry
GEOS 333 Environmental Geophysics
GEOS 335 Global Geophysics & Tectonics

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GISP 218 Geographic Information Systems

MATH 121 Elementary Statistics
MATH 151 Introduction to Calculus
MATH 170 Single-Variable Calculus
MATH 171 Multivariable Calculus
MATH 180 Introduction to Data Science
MATH 211 Discrete Mathematics / Foundations of Higher Mathematics
MATH 225 Probability and Statistics 1
MATH 241 Numerical Methods / Computational Mathematics
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