**B.A. Environmental Geoscience 49 Credit Hours**

***Required Core Courses – 21 credit hours***

ENVI 110/110L Intro to Environmental Science 4 credits

ENVI 170/170L Earth Science 4 credits

ENVI 270 Earth History 3 credits

ENVI 361 Oceanography 3 credits

ENVI 389 Intro to Field Methods 1 credit

ENVI 389L Intro to Field Methods Lab 0 credit

ENVI 461 Environmental Justice: OR

ENVI 462 Ethics and the Environment 3 credits

ENVI 457 Environmental Geology OR

ENVI 463 Soil Genesis and Classification 3 credits

TOTAL 21 credits

***Required Cognate Science Courses – 7 to 10 credit hours***

MATH 115 is required as a prerequisite for CHEM 105/L. Appropriate math placement score for Math 115 or higher will satisfy this requirement.

CHEM 105 General Chemistry I 3 credits

CHEM 105L General Chemistry I Laboratory 1 credit

Math 115 College Algebra 3 credits

MATH 241 Principles of Statistics 3 credits

OR

ENVI 240 Introduction to Quantitative Geography 3 credits

TOTAL 7-10 credits

***Directed Electives***

Select 18 credit hours from ENVI 300-400 level courses. Students have the option of diversifying their electives to cover a broad spectrum of earth science topics, or they may tailor their electives to focus on such discipline-related topics as environmental science, geoscience, water resources, geochemistry, geoarchaeology, and geotechniques. See advisor for list of discipline related topics. Up to 3 credits of other related science courses may be completed in consultation with the major advisor.

ENVI 101 – Geoscience Topics (up to 3 credits)

ENVI 201 – Prehistory and Climate Change

ENVI 260 – Archaeology Laboratory Practicum

ENVI 342 – Introduction to Geographic Information Systems

ENVI 350 – Geomorphic Processes

ENVI 351 – Regional Geomorphology

ENVI 352 – Meteorology

ENVI 353 – Weather and Climate

ENVI 356 – Water and Environmental Health

ENVI 360 – General Astronomy

ENVI 376 – Dinosaurs, Earthquakes and Volcanoes

ENVI 376L – Dinosaurs, Earthquakes and Volcanoes Lab

ENVI 380 – Mineralogy

ENVI 382 – Igneous and Metamorphic Petrology

ENVI 385 – Structural Geology

ENVI 401 – Geographic Information Systems: Applications

ENVI 402 - Geoprocessing

ENVI 405 – Fundamentals of Remote Sensing

ENVI 406 – Remote Sensing – Image Development and Interpretation

ENVI 407 – Remote Sensing: Digital Analysis of Spectral Data

ENVI 408 – Remote Sensing: Digital Analysis

ENVI 436 – Environmental Archaeology

ENVI 445 – Archaeological Methods

ENVI 446 – Midwestern Archaeology

ENVI 447 – Current Issues in Archaeology

ENVI 450 – Environmental Modeling and Mapping

ENVI 452 – Quaternary Environments

ENVI 454 – Introduction to Hydrology

ENVI 455 – Groundwater Hydrology

ENVI 456 – Lakes and Wetlands

ENVI 457 – Environmental Geology

ENVI 458 – Medical Geology

ENVI 460 – Conservation and Sustainability of Natural Resources

ENVI 461 – Environmental Justice: law, Policy, and Social Change

ENVI 462 – Ethics and the Environment

ENVI 463 – Soil Genesis and Classification

ENVI 465 – Fundamentals of Tree Ring Research

ENVI 470 – Paleontology and Geobiology

ENVI 471 – Quaternary Paleoecology

ENVI 475 – Stratigraphy and Sedimentation

ENVI 479 – Global Biogeochemical Cycles

ENVI 481 – Geochemistry

ENVI 482 – Volcanic Processes and hazards

EVNI 483 – Mineral Resources

ENVI 484 – Energy Resources

ENVI 486 – Geophysics

ENVI 489 – Field Geology

ENVI 491 – Archaeological Field School

ENVI 492 – Internship

ENVI 496 – Advanced Research

ENVI 497 – Seminar in Advanced Topics

ENVI 499 – Senior Seminar and Research