

Course Number

GEO-207-01

Course Description

Stable isotopes have become a fundamental tool in many biogeoscientific studies, from reconstructing past climates to tracking animal migration or unraveling foodwebs and even to study the origin of life on Earth and possibly other planets. This course highlights the applications of stable isotopes in biological, ecological, environmental, archeological, and geological studies. Students learn the fundamentals of stable isotope biogeochemistry in order to understand the uses and limitations of this tool. This course starts with an introduction to the fundamentals of stable isotope geochemistry and then moves on to applied topics such as paleoceanography and paleoclimatology proxies, hydrology, sediments and sedimentary rocks, biogeochemical cycling, the global carbon cycle, photosynthesis, metabolism, ecology, organic matter degradation, pollution, and more.

Academic Term

22/FA

Instructor

Gillikin, David

Location & Meeting Time

T/TH 10:55AM-12:40PM LEC

Credits

1.00

Capacity

11

Total Students

0

Additional Information

<http://www.union.edu/Geology>

Common Curriculum

WAC Writing Across Curriculum

Interdisciplinary Programs

Environmental Science & Policy

Academic Department

Geosciences

Field Of Study

Geosciences (GEO)