Course Number
GEO-320-01
Course Description
Petrology is the study of rocks and the conditions under which they form and evolve. This course will explore how the processes of melting and subsequent crystallization creates igneous rocks in different tectonic environments and how heat, pressure, and strain create metamorphic rocks. Emphasis will be on integrating different types of data (e.g. field observations, mineral assemblages, whole-rock geochemistry, mineral compositions) to understand the origin and evolution of rocks in igneous and metamorphic systems. Students will examine and characterize minerals, textures, and compositions of rocks in thin sections using a polarizing microscope, scanning electron microscope, and laser ablation inductively-coupled mass spectrometer. Rock sample suites studied could include those from Iceland, Montserrat, Mexico, New England, the Stillwater Complex (MT), and Dutchess County, NY. The course includes local field trips to see outcrops and collect samples on 2-3 weekend days to the Adirondacks, Catskills, and/or Vermont and Massachusetts.
Academic Term
22/SP
Instructor
Hollocher, Kurt
Location & Meeting Time
Olin Building-332+ T/TH 09:00AM-10:45AM LEC
Credits
1.00
Capacity
14
Total Students
5
Additional Information
http://www.union.edu/Geology
Academic Department
Geosciences
Field Of Study
Geosciences (GEO)