COURSE DETAIL

VOLCANOLOGY IN THE MEDITERRANEAN: MT. ETNA AND THE AEOLIAN ISLANDS REVEALED

Country
Italy

Host Institution
UC Center, Sicily

Program(s)
Environmental Science in Sicily

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Environmental Studies Earth & Space Sciences

UCEAP Course Number
111

UCEAP Course Suffix

UCEAP Official Title
VOLCANOLOGY IN THE MEDITERRANEAN: MT. ETNA AND THE AEOLIAN ISLANDS REVEALED

UCEAP Transcript Title
VOLCANOLOGY IN MED

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

This course explores the many aspects of volcanism on Earth, from the formation of magma below or within the crust to its eruption at the surface, focusing on the volcanism of Mt. Etna, one of the most active volcanoes in the world and a perfect natural laboratory thanks to its peculiar characteristics. The different types of eruptive styles of volcanoes are described and explained within their geological and tectonic contexts, with an additional focus on their impact on the local ecosystem and on human activities in the region, through multiple case studies and in-class discussions. A geological excursion to the Aeolian Islands volcanic archipelago provides an opportunity to further explore modern volcano monitoring techniques, with a particular focus on geophysical and geochemical methods, and of implementing data collection into a research project. This course provides students, through a combination of classroom and field-based learning, with knowledge on geophysical, geochemical and petrological monitoring methods of active volcanoes, on the techniques and strategies for analyzing and modeling monitoring data and on their use for the purpose of assessing volcanic hazard. In addition to the lectures, the students are engaged in practical exercises on instrumentation and modeling methods. The field trips and site visits also provide context to devote specific attention to the impact of volcanic eruptions on human activities and life, unveiling the close interplay between man and volcanoes around the world and throughout history.

Language(s) of Instruction
English

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Host Institution Course Details
Host Institution Campus UC Center, Sicily
Host Institution Faculty
Host Institution Degree
Host Institution Department Accent
Course Last Reviewed

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