COURSE DETAIL

FIELD METHODS IN EARTH AND ENVIRONMENTAL SCIENCES: CAPSTONE RESEARCH PROJECT

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 186

UCEAP Course Suffix

UCEAP Official Title FIELD METHODS IN EARTH AND ENVIRONMENTAL SCIENCES: CAPSTONE RESEARCH PROJECT

UCEAP Transcript Title RESEARCH PROJECT

UCEAP Quarter Units 4.50

UCEAP Semester Units

3.00

Course Description

This field-based research project course engages in all stages of earth and environmental science field investigations and allows students to gain an understanding of different research methodologies: from design to implementation, through collection and analysis of data that addresses specific research questions, identified independently by each student. The course also allows students to experience collaborative research work with clear objectives and milestones. Students draw upon the knowledge and practical skills gained during the "Volcanology of the Mediterranean" course to identify case-studies and research themes of interest to study in-depth, choosing from the wide range of geological and man-made processes and environments which students are exposed to throughout the program. During the results interpretation stage the attention is focused on developing skills for reporting field results in the format of scientific publications. While the majority of the research work is self-directed, a research advisor is assigned to each student, who provides guidance during scheduled appointments on how to locate resources and collect data, as well as review the appropriateness and feasibility of the research methods and tools in a collaborative manner with the student. Earth science and Environmental science disciplines are grounded in observations at all scales, from satellite and drone imagery to microscopic sampling; upon placing the results of such observations into geographic, spatial, and temporal frameworks, conclusions may be drawn about the processes that occur within complex environmental systems, and predictive models may be developed to assess the effect of human interactions. This course provides students with an opportunity to practice and hone key skills in gathering and analyzing data from primary sources, as well as developing a coherent and compelling argument in a scholarly manner.

Language(s) of Instruction English

Host Institution Course Number

Host Institution Course Title FIELD METHODS IN EARTH AND ENVIRONMENTAL SCIENCES: CAPSTONE RESEARCH PROJECT

Host Institution Campus

UC Center, Sicily

Host Institution Faculty

Host Institution Degree

Host Institution Department

Accent

Print