

COURSE DETAIL

MOUNTAIN GEOMORPHOLOGY

Country

Italy

Host Institution

University of Bologna

Program(s)

University of Bologna

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Geography

UCEAP Course Number

180

UCEAP Course Suffix**UCEAP Official Title**

MOUNTAIN GEOMORPHOLOGY

UCEAP Transcript Title

MNTN GEOMRPHLGY

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course is part of the Laurea Magistrale program. The course is intended for advanced level students only. Enrollment is by consent of the instructor. This course provides knowledge on process and Quaternary geomorphology, with a focus on mountain environments. The course examines aspects of sediment supply and sediment transfer, including hillslope-channel interactions, the role of hydro-meteorological forcing on the intensity and typology geomorphic transport processes. It also deals with sediment management in the Anthropocene, including the impacts of in-channel engineering infrastructures and landcover changes. Sediment yield and sediment storage in natural and regulated systems are also discussed, as well as the role of Pleistocene glaciations on the present spatial organization of geomorphic processes and sediment fluxes. In this context, the course further examines dating landforms and constraining denudation rates at millennial time scales. The lab-based component introduces students to expert-based mapping of sediment sources and channel changes, as well as glacial and periglacial landforms on remotely-sensed images to build georeferenced databases for geo-hazard assessment. The field-based component illustrates techniques for field-based mapping, characterizing channel bed texture, as well as monitoring water and sediment fluxes. The discussion is fostered by a literature review on selected topics that vary from year to year. Finally, analysis of data collected in the field is performed by groups of students, in preparation of a short technical report.

Language(s) of Instruction

English

Host Institution Course Number

88452

Host Institution Course Title

MOUNTAIN GEOMORPHOLOGY

Host Institution Course Details

<https://www.unibo.it/en/teaching/course-unit-catalogue/course-unit/2022/446813>

Host Institution Campus

BOLOGNA

Host Institution Faculty**Host Institution Degree**

LM in GEOLOGY AND TERRITORY

Host Institution Department

Biological, Geological, and Environmental Sciences

Course Last Reviewed

2022-2023

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