

COURSE DETAIL

GLOBAL CLIMATE CHANGES IN THE GEOLOGICAL PAST

Country

Italy

Host Institution

University of Bologna

Program(s)

University of Bologna

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies

UCEAP Course Number

188

UCEAP Course Suffix**UCEAP Official Title**

GLOBAL CLIMATE CHANGES IN THE GEOLOGICAL PAST

UCEAP Transcript Title

CLIMAT CHNG IN GEOL

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course is part of the Laurea Magistrale degree program and is intended for advanced level students. Enrolment is by permission of the instructor. At the end of the course the student is able to evaluate the scientific basis of Earth's past climate system, identify past states of the climate system that offer the closest analogs to the climates of the coming decades, and appreciate the scientific context for the long view on a warming world, based on the recognition of natural, past climate variability rather than mathematical models of future potential scenarios. The course consists of two modules. Module I focuses on pre-Quaternary examples of global climate changes, including quantitative methods for the study of past global changes, examples of rapid climate changes in the geological past, and the relationships between geodynamics, paleogeography, and climate. Module II focuses on climate variability during the Quaternary (glacial and post-glacial), with emphasis on the high-resolution signature of climate change in the stratigraphic record on millennial to centennial timescales, from quantitative dating methods to climate proxies.

Language(s) of Instruction

English

Host Institution Course Number

99510

Host Institution Course Title

GLOBAL CLIMATE CHANGES IN THE GEOLOGICAL PAST

Host Institution Campus

BOLOGNA

Host Institution Faculty

Host Institution Degree

LM in CLIMATE SCIENCE

Host Institution Department

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