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 Course Details
https://www.unibo.it/en/teaching/course-unit-catalogue/course-unit/2023/480741

Host Institution Campus
BOLOGNA

Host Institution Faculty

Host Institution Degree
LM in CLIMATE SCIENCE

Host Institution Department
Physics and Astronomy

Course Last Reviewed
2023-2024

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