

COURSE DETAIL

BIOGEOGRAPHY AND MACROECOLOGY

Country

Italy

Host Institution

University of Bologna

Program(s)

University of Bologna

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Geography Environmental Studies

UCEAP Course Number

181

UCEAP Course Suffix**UCEAP Official Title**

BIOGEOGRAPHY AND MACROECOLOGY

UCEAP Transcript Title

BIOGEOG&MACROECOLGY

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 examines the development and distribution of the diversity of life on Earth, with a special emphasis on plants. The course explores the spatial scaling of biodiversity, the role of biogeography, and the different levels of assembly organization, from the local to the global scales. Students shall become acquainted with methods for the measurement of biodiversity and its partitioning across scales, as well as the role of biodiversity for ecosystem functioning and stability and relations between biodiversity and climate. The course studies the use of biogeographical and macroecological theories and methods to understand the present strategies for biodiversity conservation. Students gain the capacity to investigate natural systems by means of data collection and analyses and preparation of a written report. The course discusses topics including: an introduction and historical overview; patterns of species distribution and range size; historical biogeography; ecological biogeography; spatial patterns of biodiversity in relation to latitude, climate, and area; relation between energy, productivity, and biodiversity; taxonomic and functional measures of biodiversity; data sources in biogeography and macroecology; partitioning of biodiversity in space and time; island biogeography; and human impacts on biomes and ecosystems; conservation biogeography.

Language(s) of Instruction

English

Host Institution Course Number

88270

Host Institution Course Title

BIOGEOGRAPHY AND MACROECOLOGY

Host Institution Campus

BOLOGNA

Host Institution Faculty

Host Institution Degree

LM in SCIENCES AND MANAGEMENT OF NATURE

Host Institution Department

Biological, Geological, and Environmental Sciences

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