COURSE DETAIL

HUMAN ADAPTIVE INTERACTIONS TO CHANGING ENVIRONMENT
Country Italy
Host Institution University of Bologna
Program(s) University of Bologna
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Environmental Studies Biological Sciences
UCEAP Course Number 170
UCEAP Course Suffix
UCEAP Official Title HUMAN ADAPTIVE INTERACTIONS TO CHANGING ENVIRONMENT
UCEAP Transcript Title HUMN ADAPT INTERACT
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course is part of the Laurea Magistrale program in Sciences and Management of Nature. The course is intended for advanced level students only. Enrollment is by permission of the instructor. The course focuses on the distribution of human biodiversity in the world and on the main adaptive processes that have influenced it through patterns of phenotypic and molecular variation in human populations. The course explores how the different and changing environments have prompted ecological and cultural shifts that have introduced new selective pressures that have impacted the human genome. Special attention is placed on cases in which ecological and cultural contexts have changed so rapidly in the modern era that they have trigger adaptive traits that were previously shaped by natural selection and now are shaped by maladaptive selection. The course also provides elements useful for understanding the evolutionary causes of differential susceptibilities to complex diseases in human populations. The course presents the main theoretical models developed so far to describe the processes by which human populations have biologically adapted to a variety of environmental conditions. Moreover, it describes patterns of molecular and phenotypic variation that underlie some of the most well-studied human adaptive traits. Finally, evidence supporting dis-adaptive processes undergone by present-day human populations due to rapid changes occurred in their environmental and/or cultural contexts is presented. The course is organized as follows: evolutionary principles, p rocesses enabling human biological adaptation to environmental settings, contextualization of human adaptive traits in the overall landscape of human biodiversity, case studies describing adaptive processes of human populations in response to environmental stresses, and case studies describing dis-adaptive processes of human populations due to rapid environmental/cultural changes.

Language(s) of Instruction
English

Host Institution Course Number
88266

Host Institution Course Title
HUMAN ADAPTIVE INTERACTIONS TO CHANGING ENVIRONMENT

Host Institution Course Details
https://www.unibo.it/en/study/phd-professional-masters-specialisation-schools-a…

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

Course Last Reviewed
2023-2024

Print