

Course offered for the STAT PhD program

TITLE	Methods and Principles of Biogeography
Lecturer	Gabriele Casazza, Maria Guerrina
Duration and Credits	8 hours – 2 CFU
Course description	This course provides a theoretical and practical background on historical and environmental factors affecting distributions and abundance of plants and animals and their changes over time. The course will also examine current environmental issues like climate change, invasive species, and loss of biological diversity. It will also discuss developing technologies (including genomic tools and ecological niche models) together with the availability of big data and increasingly sophisticated analytical tools to examine the biogeographical processes. Seven hours of lectures will focus on teaching key biogeographic principles and methods. One hour will commit to discussion on case studies. At the end of the course, students should have a broad understanding of the key factors that influence the distribution and abundance of organisms on earth, and how these factors operate over a range of spatial and temporal scales as well as of the main methods to study biogeographical processes.
Course organization	This course consists of frontal lessons.
Teaching period	February - March