Courses

Compulsory courses
Concept courses

701-2413-00 Evolutionary Genetics 6

Elective compulsory courses
Master courses

Autumn semester

701-0328-00 Advanced Ecological Processes 4
701-1441-00 Alpine Ecology and Environments 2
401-0625-00 Applied Analysis of Variance and Experimental Design 5
401-0649-00 Applied Statistical Regression 5
551-1299-00 Bioinformatics 6
636-0017-00 Computational Biology 6
701-1471-00 Ecological Parasitology 3
701-1703-00 Evolutionary Medicine for Infectious Diseases 3
751-5121-00 Insect Ecology 2
751-4504-00 Plant Pathology I 2
751-4401-00 Plant Protection in the Tropics: Entomology 2
701-1409-00 Research Seminar: Ecological Genetics 2
401-0625-00 Using R for Data Analysis and Graphics (Part I) 1
401-6217-00 Using R for Data Analysis and Graphics (Part II) 1

Spring semester

701-0362-00 Böden und Vegetation der Alpen (Exkursion) 2
701-1450-00 Conservation Genetics 3
701-1462-00 Evolution of Social Behavior and Biological Communication 3
701-1480-00 Evolutionary Developmental Biology 3
701-1427-00 Experimental Evolution 4
701-0344-00 Flora und Vegetation der Alpen 1
701-1424-00 Guarda-Workshop in Evolutionary Biology 3
701-1708-00 Infectious Disease Dynamics 4
751-5110-00 Insects in Agroecosystems 2
701-1418-00 Modelling Course in Population and Evolutionary Biology 4
551-0216-00 Mykologischer Feldkurs 3
701-0310-00 Naturschutz und Naturschutzbiologie 2
701-0314-00 Pflanzen- und Tierexkursion: kollin/montan 3
701-0314-01 Pflanzen- und Tierexkursion: subalpin/alpin 3
701-0323-00 Plant Ecology 3
751-4505-00 Plant Pathology II 2
701-1418-01 Quantitative Approaches to Plant Population and Community Ecology 2

Elective courses (free choice)
Concept courses

551-1299-00 Bioinformatics 6
551-0390-00 Concepts in Modern Genetics 6
551-0313-00 Microbiology I 6
551-0314-00 Microbiology II 6

Master courses

According to agreement with study advisor

Elective courses in Humanities, Social or Political Sciences
(min. 2 CP)

About this major

The Master programme in Ecology and Evolution focuses on the diversity of organisms and the interactions between organisms and their environment. Evolutionary aspects – at the level of populations, communities and ecosystems – are emphasized, because species composition is determined by natural selection. Work in the field is accompanied by investigations in experimental gardens, greenhouses, and laboratories. Modern molecular research approaches provide insights into the genetic basis of natural selection, also theoretical models and computer simulations may allow predictions for future developments.

The successful completion of the Master programme in Ecology and Evolution prepares the student for a professional career in scientific research areas concerned with questions about organismal biology. It provides a solid scientific background for further academic studies towards a PhD followed by postdoctoral training, but also provides Master graduates with a scientific profile suitable for competitive positions in the fields of ecological assessment and conservation biology.

Study advisor

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