

## Ecology and Evolution

## Courses

(min. 2 CP)

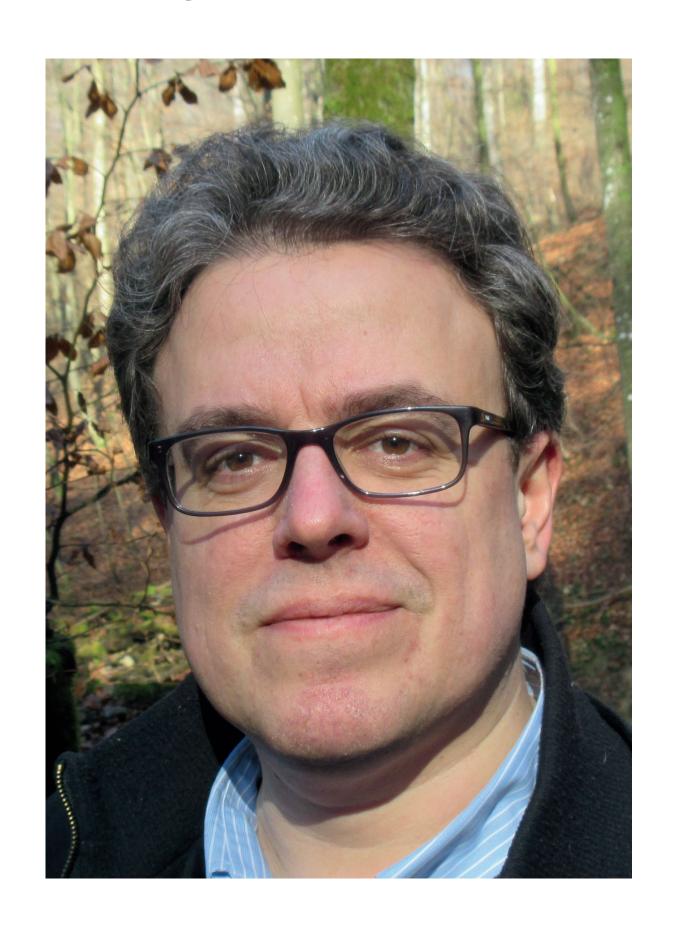
Concept courses		
Evolutionary Genetics	701-2413-00L	6
Elective compulsory courses		
Master courses		
Autumn semester		
Advanced Ecological Processes	701-0328-00L	4
Angewandte Systemökologie	701-0301-00L	3
Applied Analysis of Variance and Experimental Design	401-0625-01L	5
Applied Statistical Regression	401-0649-00L	5
Computational Biology	636-0017-00L	6
Ecological Parasitology	701-1471-00L	3
Evolutionary Dynamics	636-0009-00L	6
Evolutionary Medicine for Infectious Diseases	701-1703-00L	3
Insect Ecology	751-5121-00L	2
Plant Pathology I	751-4504-00L	2
Research Seminar: Ecological Genetics	701-1409-00L	2
Using R for Data Analysis and Graphics (Part I)/	401-6215-00L/401-6217-00L	3
Using R for Data Analysis and Graphics (Part II)		
Spring semester	101 0100 001	_
Applied Multivariate Statistics	401-0102-00L	5
Böden und Vegetation der Alpen (Exkursion)	701-0362-00L	2
Conservation Genetics	701-1450-00L	3
Evolution of Social Behavior and Biological Communication	701-1462-00L	3
Evolutionary Developmental Biology	701-1480-00L	3
Experimental Evolution  Flore and Vegetation der Alben	701-1427-00L	4
Flora und Vegetation der Alpen Guarda-Workshop in Evolutionary Biology	701-0364-00L 701-1424-00L	3
Infectious Disease Dynamics	701-1424-00L 701-1708-00L	1
Insects in Agroecosystems	751-5110-00L	2
Modelling Course in Population and Evolutionary Biology	701-1418-00L	4
Mykologischer Feldkurs	551-0216-00L	3
Naturschutz und Naturschutzbiologie	701-0310-00L	2
Pflanzendiversität: kollin/montan	701-0314-00L	3
Pflanzendiversität: subalpin/alpin	701-0314-01L	3
Plant Ecology	701-0323-00L	3
Plant Pathology II	751-4505-00L	2
Quantitative Approaches to Plant Population and	701-1410-01L	2
Community Ecology		
Selected Topics in Mycology	551-1130-00L	4
Elective courses (free choice)		
Concept courses (choose one) Bioinformatics	551-1299-00L	6
Concepts in Modern Genetics	551-0309-00L	1
Microbiology (Part I)/Microbiology (Part II)	551-0307-00L 551-0313-00L/551-0314-00L	6
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Recommended Master courses Scientific Writing for Life Sciences and Chemistry	520 0070 001	1
Scientific Writing for Life Sciences and Chemistry Writing Scientific Paperts for MSc Biology	529-0079-00L	1 2
Writing Scientific Reports for MSc Biology	551-0575-00L	<u> </u>

## **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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