

Module Name Lecture Ecology, Evolution and Environment						
Type of Module ○ Basic Module				Module Code Ecology Lecture		
Identification Number MN-B-E 1	Workload 180 h	Credit Points 6 CP	Term 1 st term of studying	Offered Every Winter term	Start Winter term only	Duration 1 term
1	Course Types Lecture		Contact Time 49 h	Private Study 131 h		Planned Group Size* Approx. 50-70 students
2	Module Objectives and Skills to be Acquired Students who successfully completed this module <ul style="list-style-type: none">• have acquired detailed knowledge on ecological theory and methods and further on the analysis of experimental data from field and laboratory studies.• have acquired knowledge on the ecology of species, populations and communities, current aspects of evolution in ecological systems, and their relationships to the aquatic, terrestrial and chemical environment.• can solve problems and develop strategies to answer questions related to environmental aspects of ecology and evolution.					
3	Module Content <ul style="list-style-type: none">• Aquatic ecology in the anthropocene• Invasion and fish biology• Terrestrial ecology• Microbial ecology• Chemical ecology• Abiotic gradients in limnology• Population ecology and genetics• Population genomics and ecological genomics• Community ecology• Phylogeny and ecology					
4	Teaching Methods <ul style="list-style-type: none">• Lecture					
5	Prerequisites (for the Module) Enrollment in the Master’s degree course “Biological Sciences” Additional academic requirements The knowledge of ecology on the level of general biology text books (e.g. Ecology: From Individuals to Ecosystems by Begon & Townsend or Community Ecology by Verhoef & Morin) is required.					

6	Type of Examination Two hours written examination about topics of the lectures (100 % of the total module mark)
7	Credits Awarded Written examination at least "sufficient"
8	Compatibility with other Curricula* None
9	Proportion of Final Grade 7.5 %
10	Module Coordinator Prof. Dr. Hartmut Arndt, phone 470 3100, e-mail: teach-ecology@uni-koeln.de
11	Further Information <p>Participating faculty: Prof. Dr. H. Arndt, Prof. Dr. M. Bonkowski, apl. Prof. Dr. J. Borchering, Prof. Dr. E. von Elert, PD Dr. K. Lampert, Dr. F. Nitsche, JProf. Dr. A.-M. Waldvogel</p> <p>Literature:</p> <ul style="list-style-type: none"> Information on recommended textbooks and other reading material will be given on the ILIAS representation of the course (see https://www.ilias.uni-koeln.de/ilias/goto_uk_cat_2815610.html) <p>General time schedule: Weeks 1-14: Mon. from 10:00 to 10:45 a.m., Wed. from 10:00 to 11:30 a.m. and Fri. from 12:00 to 12:45 a.m.; Week 15 (Mon-Fri): Preparation for the written examination</p> <p>Introduction to the module: October 07, 2022 at 9:00 a.m., online (further information/link will be sent to your Smail-Account); for preparation to the module before this introduction see ILIAS link under literature.</p> <p>Written examination: February 13, 2023, second/supplementary examination March 13, 2023; the latter date may vary if students and module coordinator agree. More details will be given at the beginning of the module.</p>

* Depending on how many students from other subject areas (and if indicated also from other master's degree courses, see 5) choose this module.