

<b>Module Name</b> Lecture Ecology, Evolution and Environment						
<b>Type of Module</b> ○ Basic Module				<b>Module Code</b> Ecology Lecture		
<b>Identification Number</b> MN-B-E 1	<b>Workload</b> 180 h	<b>Credit Points</b> 6 CP	<b>Term</b> 1 <sup>st</sup> term of studying	<b>Offered Every</b> Winter term	<b>Start</b> Winter term only	<b>Duration</b> 1 term
<b>1</b>	<b>Course Types</b> Lecture		<b>Contact Time</b> 49 h		<b>Private Study</b> 131 h	
<b>2</b>	<b>Module Objectives and Skills to be Acquired</b> Students who successfully completed this module <ul style="list-style-type: none"> <li>• have acquired detailed knowledge on ecological theory and methods and further on the analysis of experimental data from field and laboratory studies.</li> <li>• 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.</li> <li>• can solve problems and develop strategies to answer questions related to environmental aspects of ecology and evolution.</li> </ul>					
<b>3</b>	<b>Module Content</b> <ul style="list-style-type: none"> <li>• Aquatic ecology in the anthropocene</li> <li>• Invasion and fish biology</li> <li>• Terrestrial ecology</li> <li>• Microbial ecology</li> <li>• Chemical ecology</li> <li>• Abiotic gradients in limnology</li> <li>• Population ecology and genetics</li> <li>• Population genomics and ecological genomics</li> <li>• Community ecology</li> <li>• Phylogeny and ecology</li> </ul>					
<b>4</b>	<b>Teaching Methods</b> <ul style="list-style-type: none"> <li>• Lecture</li> </ul>					
<b>5</b>	<b>Prerequisites (for the Module)</b> Enrollment in one of the Master's of Science degree courses of the Department of Biology <b>Additional academic requirements</b> 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.					

<b>6</b>	<b>Type of Examination</b> Two hours written examination about topics of the lectures (100 % of the total module mark)
<b>7</b>	<b>Credits Awarded</b> Written examination at least "sufficient"
<b>8</b>	<b>Compatibility with other Curricula*</b> Optional module for the second (or third) obligatory lecture module in the other Master's of Science degree courses of the Department of Biology
<b>9</b>	<b>Proportion of Final Grade</b> 7.5 %
<b>10</b>	<b>Module Coordinator</b> Prof. Dr. Hartmut Arndt, phone 470 3100, e-mail: teach-ecology@uni-koeln.de
<b>11</b>	<b>Further Information</b> <b>Participating faculty:</b> Prof. Dr. H. Arndt, Prof. Dr. M. Bonkowski, apl. Prof. Dr. J. Borcharding, Prof. Dr. E. von Elert, PD Dr. K. Lampert, Dr. F. Nitsche, JProf. Dr. A.-M. Waldvogel <b>Literature:</b> <ul style="list-style-type: none"><li>Information on recommended textbooks and other reading material will be given on the ILIAS representation of the course (see <a href="https://www.ilias.uni-koeln.de/ilias/goto_uk_cat_2815610.html">https://www.ilias.uni-koeln.de/ilias/goto_uk_cat_2815610.html</a>)</li></ul> <b>General time schedule:</b> Weeks 1-14: Mo. 10 to 10:45 am, Wed. 10 to 11:30 am and Fr. 12 to 12:45 am; Week 15 (Mon.-Fri). Preparation for the written examination <b>Introduction to the module:</b> October 06, 2023 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. <b>Written examination:</b> February 19, 2024, second/supplementary examination March 11, 2024; the latter date may vary if students and module coordinator agree. More details will be given at the beginning of the module