

module code /  
module title

## ConcEcol / Concepts of Ecology

 date / version of the module  
description 25.05.2022

1 INFORMATION ON THE MODULE	
1a	module code ConcEcol
1b	module title (German title) Konzepte der Ökologie
1c	module title (English title) Concepts of Ecology
1d	credit points 6
1e	responsible for the module Prof. Dr. Martin Diekmann
1f	type of module compulsory module
1g	programs using the module M.Sc. Ecology
1h	organizational unit offering the module Klicken Sie hier, um Text einzugeben.
1i	content-related prior knowledge or skills Klicken Sie hier, um Text einzugeben.
1j	learning contents <ul style="list-style-type: none"> <li>• Important concepts in different sub-disciplines of ecology</li> <li>• Levels of ecological studies from autecology to ecosystems</li> <li>• Autecology: life forms, responses of species along resource gradients, range size and local distribution</li> <li>• Population ecology: population growth and intraspecific competition, interspecific competition, plant-animal interactions</li> <li>• Community ecology: species assemblages, biodiversity, impacts of habitat and climate change, invasions</li> <li>• Ecosystems: Energy flow and nutrient cycles, eutrophication</li> </ul>

1k	learning outcomes/ competencies/ targeted competencies	<ul style="list-style-type: none"> <li>• Students have a basic overview of universal, modern concepts of ecology</li> <li>• They can identify suitable and appropriate, observational and experimental, methods to answer research questions related to both basic and applied ecology</li> <li>• They understand that ecological problems cannot be solved by a reductionistic approach, neglecting the intricate interactions between organisms and their abiotic and biotic environment</li> <li>• They can take responsibility in a group work to tackle ecological research questions – from literature search to data extraction – and to translate this work into a joint oral presentation</li> <li>• They comprehend that the concept of sustainability has its foundation in ecological principles</li> </ul>																																																																														
1l	calculation of student workload  <i>(part a: calculation of presence time and working hours)</i>	<p><b>The total amount of the presence time and working hours of the module has to be calculated additionally in the detailed calculation a) to c).</b></p> <p><b>a) detailed calculation:</b> <b>SWS / presence time/working hours in each course of the module</b></p> <table border="1"> <tr> <td><input checked="" type="checkbox"/></td> <td>1</td> <td>lecture(s) with</td> <td>1</td> <td>SWS/ contact hours</td> <td>14</td> <td>hours of presence time</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>1</td> <td>seminar(s) with</td> <td>1</td> <td>SWS/ contact hours</td> <td>14</td> <td>hours of presence time</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>1</td> <td>exercise(s) with</td> <td>1</td> <td>SWS/ contact hours</td> <td>14</td> <td>hours of presence time</td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td>internship(s) with</td> <td></td> <td>sum of working hours</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td>seminar(s) with</td> <td></td> <td>SWS/ contact hours</td> <td></td> <td>total hours of presence time</td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td>laboratory/laboratories with</td> <td></td> <td>SWS/ contact hours</td> <td></td> <td>total hours of presence time</td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td>tutorial(s) with</td> <td></td> <td>SWS/ contact hours</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td>excursion(s) with</td> <td></td> <td>SWS contact hours in total</td> <td></td> <td>working hours</td> </tr> <tr> <td><input type="checkbox"/></td> <td></td> <td colspan="5">other form of course (e.g. block seminar), namely this:</td> <td></td> </tr> <tr> <td colspan="7">Klicken Sie hier, um Text einzugeben.</td> </tr> <tr> <td></td> <td>with</td> <td>SWS / with totaly</td> <td></td> <td>contact hours</td> <td><input type="checkbox"/></td> <td>presence time <input type="checkbox"/> working hours</td> </tr> </table>	<input checked="" type="checkbox"/>	1	lecture(s) with	1	SWS/ contact hours	14	hours of presence time	<input checked="" type="checkbox"/>	1	seminar(s) with	1	SWS/ contact hours	14	hours of presence time	<input checked="" type="checkbox"/>	1	exercise(s) with	1	SWS/ contact hours	14	hours of presence time	<input type="checkbox"/>		internship(s) with		sum of working hours			<input type="checkbox"/>		seminar(s) with		SWS/ contact hours		total hours of presence time	<input type="checkbox"/>		laboratory/laboratories with		SWS/ contact hours		total hours of presence time	<input type="checkbox"/>		tutorial(s) with		SWS/ contact hours			<input type="checkbox"/>		excursion(s) with		SWS contact hours in total		working hours	<input type="checkbox"/>		other form of course (e.g. block seminar), namely this:						Klicken Sie hier, um Text einzugeben.								with	SWS / with totaly		contact hours	<input type="checkbox"/>	presence time <input type="checkbox"/> working hours
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		<p>= sum of presence time and working hours:</p> <p>42</p>
	<p>calculation of student workload</p> <p><i>(part b: preparation time and follow-up work/self-study)</i></p>	<p><b>b) working hours for preparation/follow-up work of the course(s) and/or self-study</b></p> <p>= sum of working hours:</p> <ul style="list-style-type: none"> <li>Lecture: 14 hours</li> <li>Seminar: 40 hours</li> <li>Exercises: 14 hours</li> </ul> <p>68 hours in total</p>
	<p>calculation of student workload</p> <p><i>(part c: exam preparation etc.)</i></p>	<p><b>c) exam preparation (incl. examination)</b></p> <p>= sum of working hours:</p> <p>70 hours</p>
	<p>calculation of student workload</p> <p><i>(total amount of hours including a) - c))</i></p>	<p><b>Total amount of the presence time and working hours a) to c):</b></p> <p>180 hours</p>
1m	<p>description of possible optional courses in the module</p>	<p><u>Can a student choose between different courses within the module?</u></p> <p>NO</p> <p><u>Short description of selection option</u></p> <p>Klicken Sie hier, um Text einzugeben.</p>
1n	<p>language(s) of instruction</p>	<p><input type="checkbox"/> German      <input checked="" type="checkbox"/> English      <input type="checkbox"/> Spanish      <input type="checkbox"/> French</p> <p><input type="checkbox"/> Other, namely this:</p> <p>Klicken Sie hier, um Text einzugeben.</p>
1o	<p>frequency</p>	<p><i>(regular cycle module is offered) e.g.: winter semester, yearly or summer semester, yearly or each semester</i></p> <p>winter semester yearly</p> <p>Klicken Sie hier, um Text einzugeben.</p>
1p	<p>duration</p>	<p>choose an option</p> <p>three weeks (including the examination)</p>

1q	Literature ( <i>optional</i> )	Klicken Sie hier, um Text einzugeben.
1r	more information on the module ( <i>optional</i> )	Instructor: Martin Diekmann
<b>2</b>	<b>INFORMATION ON THE MODULE EXAMINATION</b> (see also AT Art. 5 section 8)	
2a	type of examination	<input type="checkbox"/> module exam; i.e. exam with only one component (MP) <input checked="" type="checkbox"/> combination exam, i.e. exam with several components (administered by instructors) (KP) <input type="checkbox"/> partial exam; i.e. exam with several components (administered by registrar) (TP)
2b	exam components or prerequisites ( <i>type, number</i> )	<p><i>PL</i> = graded component of the examination  <i>SL</i> = ungraded component of the examination, coursework  <i>PVL</i> = prerequisite of the examination (see AT Art. 5 Section 10)</p> <input checked="" type="checkbox"/> PL   1 <input checked="" type="checkbox"/> SL   1 <input type="checkbox"/> PVL   justification
		<p>If necessary, further explanations:</p> <p>PL = Written examination, SL = oral presentation</p>
2c	Give this information for combination examinations only: Weights (in percentage) of component grades	<p>PL 1: Klicken Sie hier, um Text einzugeben.</p> <p>PL 2: Klicken Sie hier, um Text einzugeben.</p> <p>PL 3: Klicken Sie hier, um Text einzugeben.</p> <p>PL 4: Klicken Sie hier, um Text einzugeben.</p> <p>If necessary, further comments:</p> <p>Klicken Sie hier, um Text einzugeben.</p>
2d	form of examination (see AT BPO/AT MPO Art. 8, 9 and 10)	<input type="checkbox"/> Assignment <input type="checkbox"/> Oral examination (single) <input checked="" type="checkbox"/> Presentation, oral <input checked="" type="checkbox"/> Written examination <input type="checkbox"/> Group examination, oral <input type="checkbox"/> Presentation and written assignment <input type="checkbox"/> Portfolio <input type="checkbox"/> Project report <input type="checkbox"/> Bachelor Thesis <input type="checkbox"/> Internship report <input type="checkbox"/> Colloquium <input type="checkbox"/> Master Thesis <input type="checkbox"/> Other (concrete definition is given in the examination regulations):
		Klicken Sie hier, um Text einzugeben.
2e	language(s) of instruction	<input type="checkbox"/> German <input checked="" type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> French <input type="checkbox"/> Other, namely this:
		Klicken Sie hier, um Text einzugeben.