

module code /
module title

GisAppl / GIS Applications in Ecology

 date / version of the module
description 25.05.2022

1 INFORMATION ON THE MODULE	
1a	module code GisAppl
1b	module title (German title) GIS Anwendungen in der Ökologie
1c	module title (English title) GIS Applications in Ecology
1d	credit points 3
1e	responsible for the module Prof. Dr. Martin Diekmann
1f	type of module elective 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"> • General introduction to the concept of Geographical Information Systems (GIS) • Basic overview about the program QGIS and its structure and applications • Use of various features, among others vector tools (geometry and geoprocessing tools), attribute tables, selection of features and joining • Introduction to digitalization and import of own research data • Map editing of the produced data • Exemplary ecological applications

1k	learning outcomes/ competencies/ targeted competencies	<ul style="list-style-type: none"> • Students have general knowledge of the use of the program QGIS and its potential applications in ecology • They can digitalize, import and transform own or external research data for basic spatial and statistical analyses • They can process the acquired data graphically for presentation and publication 																																																																																												
1l	calculation of student workload <i>(part a: calculation of presence time and working hours)</i>	<p>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).</p> <p>a) detailed calculation: SWS / presence time/working hours in each course of the module</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 type="checkbox"/></td> <td></td> <td>seminar(s) with</td> <td></td> <td>SWS/ contact hours</td> <td></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 totally</td> <td></td> <td>contact hours</td> <td><input type="checkbox"/></td> <td>presence time <input type="checkbox"/> working hours</td> </tr> <tr> <td colspan="7">= sum of presence time and working hours:</td> </tr> <tr> <td colspan="7">28</td> </tr> </table>	<input checked="" type="checkbox"/>	1	lecture(s) with	1	SWS/ contact hours	14	hours of presence time	<input type="checkbox"/>		seminar(s) with		SWS/ contact hours		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 totally		contact hours	<input type="checkbox"/>	presence time <input type="checkbox"/> working hours	= sum of presence time and working hours:							28						
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	calculation of student workload <i>(part b: preparation time and follow-up work/self-study)</i>	<p>b) working hours for preparation/follow-up work of the course(s) and/or self-study</p> <p>= sum of working hours:</p> <ul style="list-style-type: none"> • Lectures: 14 hours • Exercises: 14 hours 																																																																																												

		28 hours in total
	calculation of student workload <i>(part c: exam preparation etc.)</i>	c) exam preparation (incl. examination) = sum of working hours: 34 hours
	calculation of student workload <i>(total amount of hours including a) - c)</i>	Total amount of the presence time and working hours a) to c): 90 hours
1m	description of possible optional courses in the module	<u>Can a student choose between different courses within the module?</u> NO <u>Short description of selection option</u> Klicken Sie hier, um Text einzugeben.
1n	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.
1o	frequency	<i>(regular cycle module is offered) e.g.: winter semester, yearly or summer semester, yearly or each semester</i> winter semester yearly Klicken Sie hier, um Text einzugeben.
1p	duration	Other, namely this: Two weeks á 3 days. The project report is due 2 weeks after the end of the course.
1q	Literature <i>(optional)</i>	Klicken Sie hier, um Text einzugeben.
1r	more information on the module <i>(optional)</i>	Instructor: Cecilia Dupré
2	INFORMATION ON THE MODULE EXAMINATION (see also AT Art. 5 section 8)	
2a	type of examination	<input checked="" type="checkbox"/> module exam; i.e. exam with only one component (MP) <input 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 (type, number)	<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> <p><input checked="" type="checkbox"/> PL 1 <input type="checkbox"/> SL <input type="checkbox"/> PVL justification</p> <p>If necessary, further explanations:</p> <p>PL = Project report</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)	<p><input type="checkbox"/> Assignment <input type="checkbox"/> Oral examination (single) <input type="checkbox"/> Presentation, oral</p> <p><input type="checkbox"/> Written examination <input type="checkbox"/> Group examination, oral <input type="checkbox"/> Presentation and written assignment</p> <p><input type="checkbox"/> Portfolio <input checked="" type="checkbox"/> Project report <input type="checkbox"/> Bachelor Thesis</p> <p><input type="checkbox"/> Internship report <input type="checkbox"/> Colloquium <input type="checkbox"/> Master Thesis</p> <p><input type="checkbox"/> Other (concrete definition is given in the examination regulations):</p> <p>Klicken Sie hier, um Text einzugeben.</p>
2e	language(s) of instruction	<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>