

<b>MSc. Study programme: Biodiversity: Ecology, Evolution and Conservation Biology (BEEC)</b>												
Overview of modules offered in BEEC - status-quo March 2024												
KC:= Key competence; C:= Colloquium; V:= Lecture; UE:= Practice; S:= Seminar; GK:= Field course												
Module number	Title	Responsible lecturer	ECTS	Semester week hours	Summer term	Winter term	Language (ENGL, DE)					
<b>M.Biodiv.401</b>	<b>Biodiversity (Compulsory Module)</b>	<b>N.N.</b>	<b>12</b>	<b>16</b>			<b>ENGL</b>					
	<b>One out of seven</b>											
401.a	UE Practice in pollen analysis	Behling	3	5		+						
401.b	UE Identification of hymenoptera (M.Agr.0088)	Westphal	3	5		+						
401.c	UE Identification of grasses and grass-like plants	Hertel	3	5	+							
401.d	UE Biology and ecology of diptera	Hövmeyer	3	5	+							
401.e	UE Biodiversity and ecology of indigenous avifauna	External docent	3	5	+							
401.f	UE Identification of mosses and lichens	Kaufmann/Drehwald	3	5		+						
401.h	UE Moth diversity and ecology	Kamp	3		+							
401.3	UE 4 Field daytrips, 2 in botany, 2 in zoology		4	4	+							
401.4	UE Extended field trip in botany or zoology		5	7	+	(+)						
<b>M.Biodiv.402</b>	<b>Plant Ecology and Ecosystem Research</b>	<b>Leuschner</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>					
402.1	V Vegetation and ecology of the earth	Leuschner		2		+						
402.4	S Current topics in plant ecology and nature conservation	Hertel		2		+						
402.6	S Aut-and synecology of plants: The tropics	Homeier		2		+						
402.7	S Influence of global change on ecosystem processes, matter fluxes and diversity in temperate and boreal forests towards the subarctic tundra	Weigel		2	+							
<b>M.Biodiv.403</b>	<b>Vegetation Ecology and Vegetation History</b>	<b>Bergmeier, Behling</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>					
403.1	V Vegetation & ecology of the earth	Leuschner		2		+						
403.1	V General and plant sociological vegetation ecology	Bergmeier		2		+						
403.2	V General vegetation history of the earth	Behling		2	+							
403.3	S Applied vegetation ecology of the Mediterranean (annual alternation with 403.4)	Bergmeier		2		+						
403.4	S Modern issues of vegetation science in agricultural landscapes (annual alternation with 403.3)	Bergmeier		2		(22/23)						
402.7	S Influence of global change on ecosystem processes, matter fluxes and diversity in temperate and boreal forests towards the subarctic tundra	Weigel		2	+							
<b>M.Biodiv.404</b>	<b>Animal Ecology</b>	<b>Scheu</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>					
404.1	V Animal ecology			2		+						
404.2	S Topics in animal ecology and evolution			2		+						
<b>M.Biodiv.406</b>	<b>Regional Vegetation Ecology and Phytodiversity</b>	<b>Bergmeier</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>					
406.1	V Habitat types of the FFH-Guideline			2		+						
403.3	S Applied vegetation ecology of the Mediterranean (annual alternation with 403.4)			2		+						

403.4	S	Modern issues of vegetation science in agricultural landscapes (annual alternation with 403.3)			2		(22/23)	
<b>M.Biodiv.412</b>		<b>Conservation Biology</b>	<b>Kamp</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
412.1	V	International nature conservation	Kamp		2		+	
412.2	V	The song of the Dodo - Origins of Conservation Biology	Waltert		2		+	
412.3	S	Botanical nature conservation and environmental care	Leuschner		2	+		
M.Forst.1512.1	S	Global environmental and forest policy	Hubo		2		+	
M.Agr.0089	S	Ecological Seminar	Westphal		2			
<b>M.Biodiv.413</b>		<b>Education for sustainable development: Focus education of biodiversity</b>	<b>Bögeholz</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
	S	Education for sustainable development: Focus education of biodiversity			2	+		
	V	Education for biodiversity			2	+		
<b>M.Biodiv.415</b>		<b>Evolution: Evolutionary Biology</b>	<b>Friedl</b>	<b>6</b>	<b>4</b>			<b>DE</b>
415.1	V	Evolutionary biology	Various lecturers		2		+	
415.2	V	Phylogeography	Zinner, Roos		2	+		
<b>M.Biodiv.417</b>		<b>Scientific Project Management and Specific Research Methods (Compulsory Module, individually organised)</b>	<b>N.N.</b>	<b>6</b>	<b>6</b>			<b>ENGL</b>
	C	Modern Research in Biodiversity and Ecology	N.N.		2	+	+	
	UE	Conception and presentation of a scientific research concept	Docents of BEEC		4	+	+	
<b>M.Biodiv.418</b>		<b>Pro- and Eucaryotic Algae: Evolution and Systematics</b>	<b>Friedl</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
418.1	V	Phylogeny and systematics of plants and algae: biology and phylogeny of algae			2		+	
418.2	S	Plant systematics & phycology			2		+	
<b>M.Biodiv.421</b>		<b>Plant Ecology: Project Course Plant Ecology</b>	<b>Hertel</b>	<b>6</b>	<b>8</b>			<b>DE</b>
421.1	V	Basics of planning, performance, and analysis of ecological research projects, and scientific writing			1		+	
421.2	UE	Scientific analysis and publication of plant ecological data			7		+	
<b>M.Biodiv.422</b>		<b>Plant Ecology: CO2- and H2O-balance of Trees</b>	<b>Leuschner</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
422.1	V	Carbon and water balance of trees	Paligi		2	+		
422.2	UE	Photosynthesis, respiration, and transpiration	Paligi		6	+		
<b>M.Biodiv.423</b>		<b>Plant Ecology: Study of Habitats</b>	<b>Hertel</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
423.1	V	Plant ecological studies of habitats			2	+		
423.2	UE	Studies of habitats of different forest types near Göttingen			6	+		
<b>M.Biodiv.424</b>		<b>Plant Ecology: Field studies of Plant Ecology, Phytodiversity, and Ecosystems Research</b>	<b>Leuschner</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
424.1	S	Ecosystems and field research			2	+		
424.2	UE	International field studies			6	+		

<b>M.Biodiv.425</b>		<b>Evolution of Embryophyta</b>	<b>Hörandl</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
425.1	V	Speciation and evolution of land plants			2		+	
425.2 / 418.2	S	Plant systematics and phycology			2	+	+	
<b>M.Biodiv.426</b>		<b>Reproduction and evolution of flowering plants</b>	<b>Hörandl</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
	UE	Developmental and reproductive biology of flowering plants			3	+		
	V	Reproductive strategies of flowering plants			1	+		
<b>M.Biodiv.428</b>		<b>Biodiversity and biogeography of embryophyta</b>	<b>Hörandl</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
428.1	S	Introduction into tropical and alpine flora			1	(+)	+	
428.2	UE: A	Alternating field excursion: Tropics or Alps			3	2025	(+)	
<b>M.Biodiv.430</b>		<b>Vegetation History: Project Study in Palaeoecology and Palynology</b>	<b>Behling</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
430.1	S	Current topics in palynology and climate dynamics			2	(+)	+	
430.2	UE	Palaeoecology and palynology			6	(+)	+	
<b>M.Biodiv.431</b>		<b>Vegetation Ecology: Applied Vegetation Ecology &amp; Multivariate Analysis</b>	<b>Bergmeier</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
431.1	V	Basics and methods of data sampling in vegetation ecology and multivariate analysis			2	+		
431.2	UE	Grassland vegetation and multivariate vegetation analysis			6	+		
<b>M.Biodiv.433 (KC)</b>		<b>Vegetation History: Multivariate Analysis in Palaeoecology</b>	<b>Behling</b>	<b>3</b>	<b>4</b>			<b>ENGL</b>
433.1	V/S	Statistics in palaeoecology			1	+		
433.2	UE	Multivariate data analysis			3	+		
<b>M.Biodiv.434 (KC)</b>		<b>Vegetation History: Introduction in Cultivated Plant History</b>	<b>Behling</b>	<b>3</b>	<b>4</b>			<b>ENGL</b>
434.1	V	Introduction in cultivated plant history			1	+		
434.2	UE/ S	Practice in cultivated plant history - microscopic identification of subfossil plant remains			3	+		
<b>M.Biodiv.435</b>		<b>Vegetation Ecology and Vegetation History: Field studies in Phytodiversity, Vegetation Ecology, and Palaeoecology (specific announcement)</b>	<b>Bergmeier, Behling</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
435.1	S	Phytodiversity and palaeoecology of a natural and culture area			2	+	(+)	
435.2	UE	International field studies			6	+	(+)	
<b>M.Biodiv.436</b>		<b>Vegetation Ecology: Project Study of Vegetation and Phytodiversity (individual arrangement)</b>	<b>Bergmeier</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
436.1	S	Current topics in vegetation ecology and phytodiversity			2		+	
436.2	UE	Vegetation analysis and phytodiversity			2	+	(+)	
<b>M.Biodiv.437</b>		<b>Vegetation History: Methods in Paleoecology</b>	<b>Behling</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
	V	Methods in paleoecology			1	+		
	UE	Methods in paleoecology			5	+		
	S	New results in paleoecological and palynological research			2	+		
<b>M.Biodiv.441</b>		<b>Animal Ecology: Evolutionary Ecology</b>	<b>Maraun</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>

441.1	V	Evolutionary ecology			2		+	
441.2	UE	Evolutionary ecology - experiments			6		+	
<b>M.Biodiv.442</b>		<b>Animal Ecology: Synecology of Animals</b>	<b>Maraun</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
442.1	V	Synecology of animals			2		+	
442.2	UE	Synecology of animals - experiments			6		+	
<b>M.Biodiv.443</b>		<b>Animal Ecology: Field Studies in Animal Ecology and Zoological Biodiversity</b>	<b>Scheu</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
443.1	S	Field studies in animal ecology and zoological biodiversity			2		+	
443.2	UE	Field studies of mediterranean ecosystems (aquatic and terrestrial)			6		+	
<b>M.Biodiv.445</b>		<b>Animal Ecology: Molecular analysis of trophic interactions in soil food webs</b>	<b>Scheu</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
445.1	V	Molecular analysis of trophic interactions in soil food webs	Maraun		2		+	
445.2	UE	Molecular analysis of trophic interactions in soil food webs - experiments	Maraun		6		+	
<b>M.Biodiv.446</b>		<b>Molecular zoology and insect biotechnology</b>	<b>Bucher</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
	V	Gene function analysis in diverse animals and applications in pest control			2		+	
	S	Designing experiments to study gene function			2		+	
	UE	Introduction to molecular work and methods for gene function studies			4		+	
<b>M.Biodiv.447</b>		<b>Animal Ecology: Biodiversity, Ecology and Evolution of Terrestrial Invertebrates</b>	<b>Scheu</b>	<b>6</b>	<b>7</b>			<b>ENGL</b>
	V	Biodiversity and ecology of terrestrial invertebrates			2		+	
	UE	Biodiversity and ecology of terrestrial invertebrates			5		+	
<b>M.Biodiv.450</b>		<b>Plant Ecology: Impact of global climate change on plant communities and their functional traits</b>	<b>Leuschner, Weigel</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
	V	Impact of global climate change on plant communities	Weigel		2		+	
	UE	Impact of global climate change on plant communities	Weigel		6		+	
<b>M.Biodiv.461</b>		<b>Pro- and Eucaryotic Algae: Ex situ Conservation of Biodiversity of Algae</b>	<b>Lorenz</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
461.1	V	Ex situ Conservation of biodiversity of algae			1		+	
461.2	UE	Methods of ex situ conservation of algae			7		+	
<b>M.Biodiv.470</b>		<b>Morphology of animals: Microscopical methods in comparative morphology</b>	<b>Fischer Ch.</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
470.1	V	Introduction to microscopic methods & techniques of preparation			2		+	
470.2	UE	Comparative microscopic investigation of organe systems & tissue types			6		+	
<b>M.Biodiv.478</b>		<b>Field studies in systematics, biodiversity, &amp; ecology of marine invertebrates</b>	<b>Bleidorn</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
478.1	V	Introduction to marine biology			2		+	
478.2	S/UE	Field studies in systemat., biodiv. and ecol. of marine animals			6		+	
<b>M.Biodiv.479</b>		<b>Introduction to Phylogenomics</b>	<b>Bleidorn</b>	<b>6</b>	<b>6</b>			<b>ENGL</b>
479.1	V	Introduction to phylogenomics			1		+	
479.2	S	Introduction to phylogenomics			1		+	

479.3	UE	Introduction to phylogenomics			4		+	
<b>M.Biodiv.480</b>		<b>Conservation Biology: Nature Conservation Inventories</b>	<b>Hondong</b>	<b>6</b>	<b>8</b>			<b>DE</b>
480.1	V	Nature conservation inventories			2	+	+	
480.2	UE	Nature conservation inventories			6	+	+	
<b>M.Biodiv.481</b>		<b>Conservation Biology: Population Biology in Nature Conservation</b>	<b>Gottschalk</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
481.1	V	Population viability analysis			2		+	
481.2	UE	Population viability analysis			6		+	
<b>M.Biodiv.482</b>		<b>Conservation Biology: Field Studies in Conservation Biology</b>	<b>Kamp</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
482.1	V	Field studies in conservation biology			1	+		
482.2	S/UE	Field studies in conservation biology			7	+		
<b>M.Biodiv.483</b>		<b>Conservation Biology: Assessment of Wildlife Species for Nature Conservation</b>	<b>Waltert</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
483.1	V	Theoretical background of population assessment			2		+	
483.2	UE	Analysis, interpretation, and management of stand data			6		+	
<b>M.Biodiv.488</b>		<b>Conservation Biology: Ornithology</b>	<b>Gottschalk</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
488.1	V	Biology of selected bird species			2	+		
488.2	UE	Identification of birds in the field and methods in ornithology			6	+		
<b>M.Biodiv.490</b>		<b>Project Studies in Plant Systematics, Evolution and Phylogeny</b>	<b>Hörandl</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
	UE	Research project (individual arrangement)			4	+	+	
<b>M.Biodiv.491</b>		<b>Next generation sequencing for evolutionary biology</b>	<b>Appelhans</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
491.1	V	Next generation sequencing: methods, data analysis and applications			0,5	+		
491.2	S	Next generation sequencing: examples of botanical and zoological studies			0,5	+		
491.3	UE	Analysis of next generation sequencing data			3	+		
<b>M.Biodiv.492</b>		<b>Molecular methods for "Next Generation Sequencing" in Evolutionary Biology and Systematics</b>	<b>Tomasello</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
492.1	V	Introduction into molecular markers			1		+	
492.2	UE	Target enrichment and Nanopore Sequencing			3		+	
<b>M.Biodiv.600</b>		<b>Introduction to Phylogenetics</b>	<b>Bleidorn</b>	<b>6</b>	<b>8</b>			<b>ENGL</b>
600.1	V	Introduction to phylogenetics			1	+		
600.2	S	Introduction to phylogenetics			1	+		
600.3	UE	Introduction to phylogenetics			6	+		
<b>M.Biodiv.605</b>		<b>Project Studies in Animal Evolution and Biodiversity</b>	<b>Bleidorn, Aguado</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
605.1	S	Current topics in animal evolution and biodiversity			1	+	+	
605.2	UE	Research project			3	+	+	

<b>M.Biodiv.610 (KC)</b>		<b>Science Communication in Biodiversity Research (KC)</b>	<b>Aguado</b>	<b>6</b>	<b>4</b>			<b>ENGL</b>
610,1	V	Introduction to science communication			1		+	
610,2	S	Introduction to science communication			1		+	
610,3	UE	Science communication in biodiversity research			2		+	
<b>M.Geg.17</b>		<b>Landscape Ecology</b>	<b>Sauer</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>ENGL</b>
<b>B.Geo.209</b>		<b>Biosedimentology</b>	<b>Arp</b>	<b>6</b>	<b>6</b>	<b>+</b>		<b>DE</b>
<b>M.Agr.0009</b>		<b>Biological Control and Biodiversity</b>	<b>Rostas</b>	<b>6</b>	<b>6</b>		<b>+</b>	<b>ENGL</b>
<b>M.Agr.0052</b>		<b>Ecology and Nature Conservation</b>	<b>Westphal</b>	<b>6</b>	<b>6</b>		<b>+</b>	<b>DE</b>
<b>M.Agr.0061</b>		<b>Project study Nature Conservation in an Agricultural Landscape</b>	<b>Westphal</b>	<b>6</b>	<b>4</b>	<b>+</b>		<b>DE</b>
<b>M.Bio.101 (Biodiv)</b>		<b>General and Applied Microbiology</b>	<b>Stülke</b>	<b>12</b>	<b>14</b>		<b>+</b>	<b>ENGL</b>
<b>M.Bio-NF.306</b>		<b>Introduction into Behavioural Biology</b>	<b>Makolf</b>	<b>12</b>	<b>12</b>		<b>+</b>	<b>ENGL</b>
	V	Introduction into behavioural biology			2			
	UE	Practice of methods in behavioural biology			8			
	S	Concepts of behavioural biology			2			
<b>M.Bio-NF.307</b>		<b>Behavioural Biology</b>	<b>Kappeler, Fichtel</b>	<b>12</b>	<b>14</b>	<b>+</b>		<b>ENGL</b>
	V	Behavioural biology	Fichtel		3			
	UE	Practice in behavioural biology (Madagaskar, Peru)	Kappeler		10			
	S	Behavioural biology	Fichtel		1			
<b>M.Bio.346 (KC)</b>		<b>Introduction into Behavioural Biology</b>	<b>Markolf</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>ENGL</b>
	V	Introduction into behavioural biology			2			
	S	Concepts of behavioural biology			2			
<b>M.Bio.347 (KC)</b>		<b>Behavioural Biology</b>	<b>Fichtel</b>	<b>6</b>	<b>4</b>	<b>+</b>		<b>ENGL</b>
	V	Behavioural biology			3			
	S	Behavioural biology			1			
<b>M.Forst.212</b>		<b>Ecology and Politics of Forest Nature Conservation</b>	<b>Schuldt</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>DE</b>
<b>M.Forst.213</b>		<b>Genetic Resources and Physiology of Wood Plants</b>	<b>N.N.</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>DE</b>
<b>M.Forst.214</b>		<b>Biodiversity</b>	<b>Kreft</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>DE</b>
<b>M.Forst.232</b>		<b>Methods and Management of Nature Conservation</b>	<b>Schuldt</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>DE</b>
<b>M.Forst.775</b>		<b>Modern Methods in Ecology</b>	<b>N.N.</b>	<b>6</b>	<b>4</b>	<b>+</b>		<b>DE</b>
<b>M.FES.115</b>		<b>Statistical Data Analysis with R</b>	<b>Meyer</b>	<b>6</b>	<b>4</b>		<b>+</b>	<b>ENGL</b>

M.FES.124	Modern Concepts and Methods in Macroecology and Biogeography	Kreft	6	4	+		ENGL
M.Forst.754	Soils of the Earth: Distribution, Characteristics and Use	Veldkamp	6	4		+	DE
M.Forst.756	Practice in Soil Hydrology	Jansen	9	6		+	DE
M.Forst.757	Practice in Soil Microbiology	Corre	9	6		+	DE
M.Forst.774	Stable Isotopes in Terrestrial Ecology	Dyckmans	6	4		+	DE
M.FES.122	Ecological Simulation Modelling	Wiegand	6	4	+		ENGL
M.Forst.742	Waldökosysteme und ihre Bewirtschaftung	Schall	6	4	+	+	DE
M.Geg.02	Problems of Utilisation of Natural Resources	Sauer	6	4	+		DE
M.Geg.06 (Biodiv)	Quaternary Climate and Landscape Development	Sauer	6	3	+		DE
M.Geo.111	Palaeobiology and Biodiversity I		6	5		+	DE
M.Geo.113	Palaeobiology and Biodiversity II		6	5,5	+		DE
M.Geo.114	Biogeochemistry	Thiel	6	6		+	DE
M.Geo.116	Palaeobotany	Schmidt	6	4		+	DE
M.INC.1006	Data Analysis for Field Biologists	Kamp	6	8		+	ENGL