

Module title		Abbreviation
Basics of Biology II		07-DM-FWBIO-2-152-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The lecture on the biology-specific contents of the curriculum for <i>Mittelschule</i> will equip students with advanced knowledge in the areas of ecology, systematics and evolutionary theory. The following topics will be discussed: human phylogeny, evolutionary factors, speciation, origins of life, fundamental principles of animal and plant ecology, interactions between organisms, ecosystems and their nutrient cycles, systematics of selected classes of vertebrates (birds, mammals) and plant families, pollination and distribution of plants. With the help of selected examples of species, the exercise will provide students with an insight into the diversity of the indigenous flora and fauna. The course will discuss major families of flowering plants, their characteristics (floral formula, phyllotaxis, leaf shape) as well as criteria for their identification. The section on animal identification will focus on indigenous vertebrates but will also include the identification of several invertebrates. The module will also include field trips to biotopes, zoos/wildlife parks and ecosystems in the vicinity of Würzburg. On these field trips, students will identify animals and plants encountered in the field that are typical for the respective habitats. In addition, they will investigate important aspects on ecosystems as well as the cohabitation of organisms.</p>		
Intended learning outcomes		
<p>Familiarity with criteria for the identification and classification of animals and plants. Identification of important representatives of the indigenous flora and fauna. Familiarity with the nomenclature and systematics of animals and plants as well as with criteria for classification in the diversity of the flora and fauna. Awareness of the fact that biotopes are elements of the landscape that should be conserved. Ability to classify animals and plants unknown to students in the nested system of animals and plants. Familiarity with ecosystems as places of cohabitation of different organisms. Ability to understand the fact that evolution is a key tool for the creation of biological diversity. Ability to use dichotomous keys and computer-based identification aids.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (2)		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>oral examination in groups (approx. 15 minutes per candidate) Assessment offered: Once a year, summer semester creditable for bonus</p>		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 38 I Nr. 1		
Module appears in		

First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Middle School) (2015)
First state examination for the teaching degree Mittelschule Didactics in Biology (Middle School) (2015)
First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Middle School) (2020 (Prüfungsordnungsversion 2015))
First state examination for the teaching degree Mittelschule Didactics in Biology (Middle School) (2020 (Prüfungsordnungsversion 2015))