

Module title		Abbreviation
Didactics in Biology I		07-DH-FDBIO1-092-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	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	By way of exception, additional prerequisites are listed in the section on assessments.
Contents		
<p>In this module, students will acquire fundamental knowledge and skills in the area of biology didactics. The lecture will first discuss general theories in the area of didactics as well as the nature of scientific research. It will then explore central concepts and principles of biology lessons as well as methods in biology and teaching aids. Building on this knowledge, students will learn how to outline problem-based biology lessons. The lecture will also discuss, in the context of a didactic analysis, topics such as modes of interaction in the classroom, teaching methods and approaches or the definition of learning outcomes. Out-of-classroom learning environments as well as topics in biology didactics will also be discussed. The seminar <i>Lehrplan (Curriculum)</i> will equip students with detailed knowledge on how to plan and design classes for <i>Grundschule</i>. Students will prepare didactic analyses on topics from the curriculum. They will discuss general aspects of curriculum theory and, working in small teams, will translate the material to be taught, in a didactically reduced manner, into teaching sequences and lessons. At the same time, students will integrate different teaching methods and modes of interaction in the classroom into their lessons, keeping in mind what is and what is not possible in the respective type of school, will deliver their lessons or parts of these to their fellow students and will assess these with regard to didactic aspects. The module will also provide students both with deeper insights into topics that are relevant for the respective type of school and with an outlook on phase II and III of their training. There will be separate seminars for each type of school; please select the seminar for the school type for which you are pursuing a teaching degree (<i>Grundschule</i>).</p>		
Intended learning outcomes		
<p>Knowledge of the fact that the term "teaching aids in the biology classroom" refers to originals, preparations and media. Familiarity with a biology-specific, didactic definition of the term "media". Overview of different aspects of biology-specific media (encoding, hardware, software, message, sensory modalities). Overview of classifications of media, factors that influence the choice of media as well as the function of media. Familiarity with the limitations and problems associated with the use of media in the classroom. Practical skills using media of all kinds (hardware side). Ability to independently prepare media or preparations. Ability to use teaching aids in classroom situations in a way that is appropriate for pupils and the material taught. Advantages and disadvantages of specific teaching aids; limitations associated with the use of media in the classroom.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>This module comprises 2 module components. Information on courses will be listed separately for each module component.</p> <ul style="list-style-type: none"> • 07-LA-FDGRU-2-092: S (no information on SWS (weekly contact hours) and course language available) • 07-GH-FDBIO1-1-092: V (no information on SWS (weekly contact hours) and course language available) 		
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>Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.</p>		
Assessment in module component 07-LA-FDGRU-2-092: School-Type-Specific Didactics in Biology (Seminar)		
<ul style="list-style-type: none"> • 2 ECTS, Method of grading: numerical grade • written examination (30 to 45 minutes) or term paper (10 to 15 pages) 		

- Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises, seminars and lab courses (weekly courses: a maximum of one incident of unexcused absence and one excused absence for a legitimate reason; fortnightly courses: one incident of unexcused absence) and successful completion of the respective exercises (required percentage as specified at the beginning of the course). The preparation of logs (10 to 15 pages) is an admission prerequisite to assessment.

Assessment in module component 07-GH-FDBIO1-1-092: Introduction to Didactics in Biology (Lecture)

- 3 ECTS, Method of grading: numerical grade
- written examination (60 to 90 minutes)

Allocation of places

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Additional information

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Referred to in LPO I (examination regulations for teaching-degree programmes)

§ 36 (1) 7. Didaktik der Grundschule Biologie
 § 38 (1) 1. Didaktik der Hauptschule Biologie
 § 38 (1) 1. Didaktik der Mittelschule Biologie
 § 41 (1) 6. Biologie Fachdidaktik
 § 61 (1) 8. Biologie Didaktik

Module appears in

First state examination for the teaching degree Grundschule Didactics in Biology (Primary School) (2009)
 First state examination for the teaching degree Hauptschule Didactics in Biology (Secondary School) (2009)
 First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Secondary School) (2009)
 First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Middle School) (2013)
 First state examination for the teaching degree Mittelschule Didactics in Biology (Middle School) (2013)