Module title | Module Didactics in Biology: Teaching Science with Hands-on-Exhibits
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Abbreviation | 07-LA-FDHAN-102-m01

Module coordinator | head of group Didactics of Biology

Module offered by | Faculty of Biology

ECTS | 2
Method of grading | Only after succ. compl. of module(s)

Duration | 1 semester
Module level | undergraduate
Other prerequisites | --

Contents

[Version 1: This seminar will provide students preparing for the written state examination with an opportunity to revise key topics in biology didactics. In small teams, students will prepare and deliver presentations on three key areas. The first block will discuss an area of the theory of biology didactics, this will be followed by the discussion of a topic in the biology classroom with respect to aspects of the scientific discipline and a didactic analysis. In the final part of the course, students will solve an exam paper from a previous year.] [Version 2: Using examples from the classroom, the seminar will acquaint students with specific teaching aids (originals, preparations and media) for use in the biology classroom and will assess these with regard to the media literacy skills to be developed. The seminar will discuss both traditional aids used in the biology classroom and modern media. After having received a theoretical introduction to teaching aids, students will be arranged into small teams that will deliver lessons or individual phases of lessons on specific topics from the curriculum. They will focus on a teaching aid of their choice which will subsequently be assessed with regard to aspects of media didactics.]

Intended learning outcomes

Familiarity with relevant aspects of biology didactics and awareness of the fact that typical methods of the discipline play a central role in the biology classroom. Ability to design lively biology lessons, using original objects and teaching aids. Ability to use methods in biology in a way that promotes the learning processes of pupils. Familiarity with both biology-specific and interdisciplinary topics from the curriculum for Grundschule. Ability to prepare didactic analyses of selected topics from the curriculum for Grundschule and to subsequently present these topics in a manner that is tailored to the target group. Ability to prepare didactic analyses of topics from the curriculum for Grundschule. Ability to translate, with the help of didactic analyses, selected topics from the curriculum into teaching sequences and lessons as well as to deliver these teaching sequences and lessons, applying problem-based and/or open teaching methods. Overview of experiments on botany, zoology and human biology typically performed in the Grundschule biology classroom. Ability to implement the experiments in the classroom and to integrate them into activity and problem-based lessons. Insight into frameworks for education in Grundschule. Insight into legal and social factors that influence schools.

Courses | (type, number of weekly contact hours, language — if other than German)
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S (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)

seminar paper (7 to 10 pages)

Allocation of places | --

Additional information | --

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

Module appears in | keinem Studiengang zugeordnet