Module title
Teaching 1

Abbreviation
11-P-FD1-092-m01

Module coordinator
holder of the Chair of Physics and its Didactics

Module offered by
Faculty of Physics and Astronomy

ECTS
4

Method of grading
numerical grade

Duration
1 semester

Module level
undergraduate

Other prerequisites
Prior completion of module 11-P-E recommended.

Contents
Student preconceptions and typical learning difficulties in school physics, corresponding teaching methods and techniques to change student preconceptions; epistemological and working methods of physics. Justification/legitimation of physics education, educational goals of physics, qualification models and educational standards: elementarisation and didactic reconstruction of physical contents, methods of physics education, media in physics education and their application to support learning.

Intended learning outcomes
In-depth understanding of school-relevant areas of Physics; knowledge of typical student preconceptions and learning difficulties; knowledge of how to change student preconceptions; knowledge of alternative teaching approaches for selected topics; knowledge of epistemological methods of Physics; knowledge of the legitimation and goals of the school subject Physics; knowledge of elementarising and teaching methods; knowledge of physical teaching and working tools.

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

Einführung Fachdidaktik 1 (Introduction to Didactics 1): S (2 weekly contact hours), once a year (summer semester)

Einführung Fachdidaktik 2 (Introduction to Didactics 2): V (1 weekly contact hour) + Ü (1 weekly contact hour), once a year (summer semester)

Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

This module has the following assessment components
1. Seminar (Einführung Fachdidaktik 1/Introduction to Didactics 1): term paper (approx. 8 pages) or presentation (approx. 30 minutes) or oral examination of one candidate each (approx. 10 minutes) or oral examination in groups (approx. 20 minutes, groups of 2 candidates).
2. Topics covered in lectures and exercises (Einführung Fachdidaktik 2/Introduction to Didactics 2): written examination (approx. 45 minutes) or term paper (approx. 8 pages) or presentation (approx. 30 minutes) or oral examination of one candidate each (approx. 10 minutes) or oral examination in groups (approx. 20 minutes, groups of 2 candidates).

Students must register for assessment components 1 and 2 online (details to be announced).
To pass this module, students must pass both assessment component 1 and assessment component 2.

Allocation of places
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Additional information
Important information on number and allocation of places: There is a restricted number of places. Should the number of applications exceed the number of available places, places will be allocated as follows: Places will be allocated according to the number of subject semesters/ECTS credits (1st: studying in 3rd subject semester or higher, 2nd: has achieved a minimum of 50 ECTS credits, and 3rd: highest number of subject semesters if studying in 1st or 2nd subject semester). Among applicants with the same number of subject semesters/ECTS credits, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.
### Module description

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

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**Module appears in**

- First state examination for the teaching degree Grundschule Physics (2009)
- First state examination for the teaching degree Hauptschule Physics (2009)
- First state examination for the teaching degree Realschule Physics (2009)
- First state examination for the teaching degree Gymnasium Physics (2009)
- First state examination for the teaching degree Mittelschule Physics (2013)