## Module description

### Module title

**Physics Teaching Concepts 2**

**Abbreviation**

11-L-PD2-152-m01

### Module coordinator

Managing Director of the Institute of Applied Physics

### Module offered by

Faculty of Physics and Astronomy

### ECTS

3

### Method of grading

only after succ. compl. of module(s)

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

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### Contents

Extension of the basic knowledge of subject didactics. 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)

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### Method of assessment

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

a) written examination (approx. 45 minutes) or b) oral examination of one candidate each (approx. 10 minutes) or c) oral examination in groups (groups of 2, approx. 10 minutes per candidate) or d) term paper (approx. 8 pages)

Language of assessment: German and/or English

### Allocation of places

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### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

§ 53 I Nr. 2
§ 36 I Nr. 7
§ 77 I Nr. 2
§ 38 I Nr. 1

### Module appears in

First state examination for the teaching degree Grundschule Pedagogy of Primary Education (2015)
First state examination for the teaching degree Grundschule Physics (2015)
First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2015)
First state examination for the teaching degree Realschule Physics (2015)
First state examination for the teaching degree Gymnasium Physics (2015)
First state examination for the teaching degree Sonderpädagogik Pedagogy of Primary Education (2015)
First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Primary School) (2015)
First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2015)
First state examination for the teaching degree Sonderpädagogik Teaching at the German Mittelschule (2015)
First state examination for the teaching degree Mittelschule Didactics in Physics (2015)
First state examination for the teaching degree Mittelschule Teaching at the German Mittelschule (2015)