### Module description

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
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<tbody>
<tr>
<td>Physics Teaching Concepts 1</td>
<td>11-L-PD1-152-m01</td>
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</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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<tbody>
<tr>
<td>Managing Director of the Institute of Applied Physics</td>
<td>Faculty of Physics and Astronomy</td>
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<table>
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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>numerical grade</td>
<td>--</td>
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<table>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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### Contents

Subject-didactic study of technical contents of the basic studies, student preconceptions and subject-didactic teaching concepts. Student preconceptions and typical learning difficulties in school physics, corresponding teaching methods, and techniques to change student preconceptions; epistemological and working methods of physics.

### 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)

V (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)

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)

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 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 Didactics in Physics (Middle School) (2015)  
First state examination for the teaching degree Mittelschule Physics (2015)  
First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015)