Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Didactics in Physics (Middle School) as Didaktikfach with the Degree

Responsible: Faculty of Physics and Astronomy

Examination regulations version: 2013

Abbreviations used:
- Course types: E = field trip, K = colloquium, O = conversatorium, P = placement/lab course, R = project, S = seminar, T = tutorial, Ü = exercise, V = lecture
- Term: SS = summer semester, WS = winter semester
- Methods of grading: NUM = numerical grade, B/NB = (not) successfully completed
- Regulations: (L)ASPO = general academic and examination regulations (for teaching-degree programmes), FSB = subject-specific provisions, SFB = list of modules
- Other: A = thesis, LV = course(s), PL = assessment(s), TN = participants, VL = prerequisite(s)

Conventions for the modules in this SFB:
- Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures:
- Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.
- Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.
- Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.
In accordance with the general regulations governing the degree subject described in this module catalogue:

**LASPO2009**

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

**25-Sep-2014 (2014-52)**

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Module title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECTS</td>
<td>Duration (in semesters)</td>
</tr>
<tr>
<td>Courses</td>
<td>To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y</td>
</tr>
<tr>
<td>Method of assessment</td>
<td>Only after successful completion of if applicable</td>
</tr>
<tr>
<td>Other prerequisites</td>
<td>if applicable</td>
</tr>
<tr>
<td>Participants and allocation of places</td>
<td>if applicable</td>
</tr>
<tr>
<td>Additional information</td>
<td>if applicable</td>
</tr>
<tr>
<td>Referred to in LPO I</td>
<td>if applicable (examination regulations for teaching-degree programmes)</td>
</tr>
</tbody>
</table>
### Compulsory Courses (20 ECTS credits)

Successful completion of modules worth 20 ECTS credits in each subject selected as Didaktikfach (subject studied with a focus on teaching methodology) is a prerequisite for admission to the Erste Staatsprüfung (First State Examination) in the subject Didaktiken einer Fächergruppe der Mittelschule (Didactics of a Group of Subjects of Mittelschule).

<table>
<thead>
<tr>
<th>Course</th>
<th>ECTS</th>
<th>Duration</th>
<th>Method of grading</th>
<th>Modul level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 1 for Primary and Secondary General School</td>
<td>5</td>
<td>1 semester</td>
<td>numerical grade</td>
<td>undergraduate</td>
</tr>
<tr>
<td>Physics 2 for Primary and Secondary General School</td>
<td>5</td>
<td>1 semester</td>
<td>numerical grade</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

#### Physics 1 for Primary and Secondary General School

- **ECTS**: 5
- **Duration**: 1 semester
- **Method of grading**: numerical grade
- **Modul level**: undergraduate

**Courses**: V + Ü (no information on SWS (weekly contact hours) and course language available).

**Method of assessment**: a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 30 minutes).

**Assessment**: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.

**Other prerequisites**: Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

**Referred to in LPO I**: § 36 (1) 7. Didaktik der Grundschule Physik  
§ 38 (1) 1. Didaktik der Hauptschule Physik  
§ 38 (1) 1. Didaktik der Mittelschule Physik

#### Physics 2 for Primary and Secondary General School

- **ECTS**: 5
- **Duration**: 1 semester
- **Method of grading**: numerical grade
- **Modul level**: undergraduate

**Courses**: V + Ü (no information on SWS (weekly contact hours) and course language available).

**Method of assessment**: a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 30 minutes).

**Assessment**: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.

**Other prerequisites**: Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

**Referred to in LPO I**: § 36 (1) 7. Didaktik der Grundschule Physik  
§ 38 (1) 1. Didaktik der Hauptschule Physik  
§ 38 (1) 1. Didaktik der Mittelschule Physik
### Physics 3 for Primary and Secondary General School

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Duration</th>
<th>Method of grading</th>
<th>Modul level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1 semester</td>
<td>numerical grade</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

**Courses**

V + Ü (no information on SWS (weekly contact hours) and course language available)

**Method of assessment**

- a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 30 minutes)

Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.

**other prerequisites**

Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

**Referred to in LPO I**

§ 36 (1) 7. Didaktik der Grundschule Physik
§ 38 (1) 1. Didaktik der Hauptschule Physik
§ 38 (1) 1. Didaktik der Mittelschule Physik

### Teaching Physics in Primary and Secondary General School

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Duration</th>
<th>Method of grading</th>
<th>Modul level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1 semester</td>
<td>numerical grade</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

**Courses**

- Einführung Fachdidaktik 2 (Introduction to Didactics 2): V (1 weekly contact hour) + Ü (1 weekly contact hour), once a year (summer semester)
- Fächerübergreifender Unterricht (Teaching Interdisciplinary Contents): S (2 weekly contact hours), once a year (summer semester)

**Method of assessment**

This module has the following assessment components

1. 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).
2. Seminar (Fächerübergreifender Unterricht (Teaching Interdisciplinary Contents)): term paper (approx. 8 pages) or presentation (approx. 45 minutes) or log of a class (approx. 6 pages) or written examination (approx. 45 minutes) or oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (approx. 30 minutes).

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.

**other prerequisites**

Prior completion of module 11-P-E recommended.

**Referred to in LPO I**

§ 36 (1) 7. Didaktik der Grundschule Physik
§ 38 (1) 1. Didaktik der Hauptschule Physik
§ 38 (1) 1. Didaktik der Mittelschule Physik
§ 53 (1) 2. Physik Fachdidaktik
§ 77 (1) 2. Physik Fachdidaktik

### Extra Skills (0-15 ECTS credits)

Teaching degree students must take modules worth a total of 15 ECTS credits in the area Freier Bereich (general as well as subject-specific electives) (Section 9 LASPO (general academic and examination regulations for teaching-degree programmes)). To achieve the required number of ECTS credits, students may take any modules from the areas below.
### Freier Bereich – interdisciplinary

The interdisciplinary additional offer for a teaching degree can be found in the respective Annex "Ergänzende Bestimmungen für den Freien Bereich" im Rahmen des Studiums für ein Lehramt.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>ECTS</th>
<th>Duration</th>
<th>Method of grading</th>
<th>Modul level</th>
<th>other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-P-FB-LLL-121-m01</td>
<td>Student Lab Supervision (Physics)</td>
<td>2</td>
<td>1 semester</td>
<td>(not) successfully completed</td>
<td>undergraduate</td>
<td>This module can be chosen by students studying at least one subject in the natural sciences.</td>
</tr>
<tr>
<td>11-MIND-Ph1-121-m01</td>
<td>Low Cost - High Impact. Low-Budget Experiments for Science Courses (Physics)</td>
<td>2</td>
<td>1 semester</td>
<td>(not) successfully completed</td>
<td>undergraduate</td>
<td>This module can be chosen by students studying at least one subject in the natural sciences.</td>
</tr>
<tr>
<td>11-MIND-Ph2-121-m01</td>
<td>Teaching Science with Hands-on-Exhibits (Physics)</td>
<td>2</td>
<td>1 semester</td>
<td>(not) successfully completed</td>
<td>undergraduate</td>
<td>This module can be chosen by students studying at least one subject in the natural sciences.</td>
</tr>
</tbody>
</table>

#### Thesis (10 ECTS credits)

Preparation of a written Hausarbeit (thesis) in accordance with the provisions of Section 29 LPO I (examination regulations for teaching-degree programmes) is a prerequisite for teaching degree students to be admitted to the Erste Staatsprüfung (First State Examination). In accordance with the provisions of Section 29 LPO I, students studying for a teaching degree Mittelschule may write this thesis in the subject Didaktik einer Fächergruppe der Mittelschule (Didactics of a Group of Subjects of Mittelschule), in the subject they selected as Unterrichtsfach (subject studied with a focus on the scientific discipline) or in the subject Erziehungswissenschaften (Educational Science). Pursuant to Section 29 Subsection 1 Sentence 2 LPO I, students may also choose to write an interdisciplinary thesis.