

# **Annex SFB**

# Studienfachbeschreibung (subject description, SFB) for the subject Didactics in Physics (Secondary School) as Didaktikfach with the degree "Erste Staatsprüfung für das Lehramt an Hauptschulen"

Responsible: Faculty of Physics and Astronomy

Examination regulations version: 2009

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:

### LASP02009

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

### 20-Feb-2013 (2012-77)

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:

Abbreviation	Module title									
	ECTS		Duration	(in semesters)	Method of grading		Module level			
	Courses		To be spe	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y						
	Method of assessment		ent							
	Only after successful completion of		l if applica	if applicable						
	Other prerequisites		if applica	if applicable						
	Participants and allocation of places		ocati- if applica	if applicable						
	Additional information		on if applica	if applicable						
	Referred to in LPO I		if applica	if applicable (examination regulations for teaching-degree programmes)						

# 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 Hauptschule (Didactics of a Group of Subjects of Hauptschule).

schule).											
11-P-SP1-092-m01	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 la	nguage 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.								
		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								
11-P-SP2-092-m01	Physics 2 for Primary and Secondary General School										
	ECTS 5	5 Duration	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Courses		V + Ü (no information	on SWS (weekly contact hours) and course la	nguage 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 pre	erequisites	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		er Grundschule Physik er Hauptschule Physik er Mittelschule Physik							

11-P-SP3-092-m01	Physics 3 for Primary and Secondary General School									
	ECTS 5 Duration			1 semester	Method of gradin	g numerical grade	Modul level	undergraduate		
	Course	S		V + Ü (no information	on SWS (weekly contac	ct hours) and course lar	nguage available)	-		
				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 de § 38 (1) 1. Didaktik de § 38 (1) 1. Didaktik de	r Hauptschule Physik					
11-P-FD-	Teaching Physics in Primary and Secondary General School									
DRI-092-m01	ECTS	5	Duration	1 semester	Method of gradin	g numerical grade	Modul level	undergraduate		
	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		essment	<ol> <li>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).</li> <li>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 on of one candidate each (approx. 15 minutes) or oral examination in groups (approx. 30 minutes).</li> </ol>						
				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.  Prior completion of module 11-P-E recommended.						
	other prerequisites			'		ided.				
	Referred to in LPO I			§ 36 (1) 7. Didaktik de § 38 (1) 1. Didaktik de § 38 (1) 1. Didaktik de § 53 (1) 2. Physik Fach § 77 (1) 2. Physik Fach	r Hauptschule Physik r Mittelschule Physik ndidaktik					

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". 11-P-FB-LLL-121-**Student Lab Supervision (Physics)** mo1 Method of grading (not) successfully completed Modul level ECTS 2 Duration 1 semester undergraduate S (no information on SWS (weekly contact hours) and course language available) Courses Method of assessment | a) written examination (approx. 45 minutes) or b) term paper (approx. 8 pages, time to complete: 1 to 4 weeks) or c) examination of one candidate each (approx. 10 minutes) or d) examination in groups (approx. 20 minutes, groups of 2) other prerequisites This module can be chosen by students studying at least one subject in the natural sciences. 11-MIND-Ph1-121-Low Cost - High Impact, Low-Budget Experiments for Science Courses (Physics) Method of grading (not) successfully completed ECTS Duration 1 semester Modul level undergraduate S (no information on SWS (weekly contact hours) and course language available) Courses Method of assessment | a) written examination (approx. 45 minutes) or b) term paper (approx. 8 pages, time to complete: 1 to 4 weeks) or c) examination of one candidate each (approx. 10 minutes) or d) examination in groups (approx. 20 minutes, groups of 2) other prerequisites This module can be chosen by students studying at least one subject in the natural sciences. 11-MIND-Ph2-121-**Teaching Science with Hands-on-Exhibits (Physics)** mo1 Method of grading (not) successfully completed Modul level ECTS 12 Duration 1 semester undergraduate S (no information on SWS (weekly contact hours) and course language available) Courses Method of assessment | a) written examination (approx. 45 minutes) or b) term paper (approx. 8 pages, time to complete: 1 to 4 weeks) or c) examination of one candidate each (approx. 10 minutes) or d) examination in groups (approx. 20 minutes, groups of 2) This module can be chosen by students studying at least one subject in the natural sciences. other prerequisites 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 Hauptschule may write this thesis in the subject Didaktik einer Fächergruppe der Hauptschule (Didactics of a Group of Subjects of Hauptschule), 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. 11-P-HS-DF-Thesis in Physics Secondary General School HA-092-m01 **ECTS** 10 Duration Method of grading | numerical grade Modul level undergraduate 1 semester Courses no courses assigned Method of assessment written thesis (approx. 40 pages) Language of assessment: German, exceptions in accordance with Section 29 Subsection 4 LPO I (examination regulations for teaching degree programmes) Modules successfully Where applicable, specific modules/module components as specified by supervisor. completed Additional Information Additional information on module duration: 1 to 2 semesters.