

Module Catalogue

for the Subject

Didactics in Physics (Middle School)

as Didaktikfach

with the degree "Erste Staatsprüfung für das Lehramt für Sonderpädagogik"

> Examination regulations version: 2018 Responsible: Faculty of Physics and Astronomy

JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record L6|873|-|-|H|2018

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The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	20	5
Extra Skills		11
Physics		12
Thesis	10	37



Abbreviations used

Course types: \mathbf{E} = field trip, \mathbf{K} = colloquium, \mathbf{O} = conversatorium, \mathbf{P} = placement/lab course, \mathbf{R} = project, \mathbf{S} = seminar, \mathbf{T} = tutorial, $\ddot{\mathbf{U}}$ = exercise, \mathbf{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

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Notes

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 the 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:

LASPO2015

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

11-Jul-2018 (2018-47)

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.



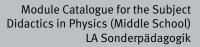


Compulsory Courses

(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).

Module	title				Abbreviation		
Physics	s Teach	ing Concepts			11-L-PD-172-m01		
Module	e coord	inator		Module offered by			
holder	of the (Chair of Physics and its	Didactics	Faculty of Physics a	nd Astronomy		
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
2 seme	ster	undergraduate					
Conten	ts						
Teaching of basic concepts of physics education and didactic consolidation of subject-relevant scientific content of the degree programme. Justification/legitimation of physics teaching; educational objectives of physics as a subject; competence models and educational standards; elementarisation and didactic reconstruction of phy- sics content; methods and media in physics lessons and their use to promote learning; student perceptions and typical learning difficulties in the subject areas of physics relevant to teaching and teaching concepts based on these; dealing with student perceptions; teaching approaches to the structure and cognitive/working methods of the science of physics, including historical development; Intended learning outcomes							
			ysics teaching concepts	s to design target gro	oun-orientated physi	cs lessons	
They cle familia	early di r with s	ifferentiate didactic as subject-specific studen	bects of physics lesson t conceptions and their procepts against this bac	s from scientific and significance for the	educational aspects	s. They are	
Course	S (type, r	number of weekly contact hour	s, language — if other than Ger	man)			
V (2) + ^v	V (2) +	Ü (1)					
		sessment (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	t every semester, informati	on on whether	
b) oral (c) oral (d) term	examir examin paper		e each (approx. 15 minu s of 2, approx. 15 minut				
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ıg cycl	e					
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)			
§ 36 N § 38 N § 53 N § 77 N	lr. 1 r. 2						
Module	e appea	ars in					
First sta	ate exa	mination for the teachi	ng degree Grundschule ng degree Grundschule ng degree Realschule F	Didactics in Physics	s (Primary School) (2	018)	
LA Sonderp School) (20		Didactics in Physics (Middle		ited 19-Apr-2025 • exam. reg ;ik (Mittelschule-Didaktikfach		page 6 / 37	



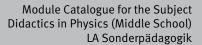
First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

Module	e title				Abbreviation
Physics	s 1 for F	Primary and Secondary G	ieneral School		11-L-SP1-152-m01
Module	e coord	inator		Module offered by	<u> </u>
holder	of the (Chair of Physics and its D	idactics	Faculty of Physics a	and Astronomy
ECTS		od of grading	Only after succ. con		
		rical grade			
5 Duratio		Module level	 Other prevenuisites		
			Other prerequisites		
1 seme	ster	undergraduate			
Conten	ts				
		ents (mechanics, thermoo und- and Hauptschule.	dynamics) relevant to	classes in Natural S	Sciences or technical-natural
Intende	ed lear	ning outcomes			
classes demon	s in Gru stration	nd- and Hauptschule; kn n and pupils experiments	owledge of typical ap 5.	pproaches to the imp	scientific or technical-scientific olementation and evaluation of
		number of weekly contact hours, l	language — If other than Ger	man)	
V (3) +					
		sessment (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
Allocat		ssessment: German and, places	/or English		
Additio	nal inf	ormation	-		
Worklo	ad				
150 h					
Teachir	ig cycl	e			
		LPO I (examination regulation	s for teaching-degree progra	mmes)	
§ 36 N § 38 N					
Module	e appea	ars in			
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			g degree Grundschule	Didactics in Physics	s (Middle School) (2018) s (Primary School) (2020) nysics (Middle School) (2020)

Module	title				Abbreviation
Physics	s 2 for I	Primary and Secondary G	ieneral School		11-L-SP2-152-m01
Module coordinator				Module offered by	
holder	of the O	Chair of Physics and its D	idactics	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5		rical grade			
Duratio		Module level	Other prerequisites		
1 semes		undergraduate			
Conten		undergraduate			
Physica	al conte	ents (science of electricity und- and Hauptschule.	/, electronics) relevar	nt to classes in Natur	ral Sciences or technical-natural
Intende	ed learr	ning outcomes			
classes demons	in Gru stratior	nd- and Hauptschule; kn n and pupils experiments	owledge of typical ap	proaches to the imp	scientific or technical-scientific olementation and evaluation of
		umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) + l	Ü (1)				
		essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether
b) oral e c) oral e Langua	examin examin ge of a	nination (approx. 90 min ation of one candidate e ation in groups (groups c ssessment: German and,	ach (approx. 15 minu of 2, approx. 15 minut	-	
Allocati	ion of p	olaces			
Additio	nal info	ormation			
Worklo	ad				
150 h					
Teachir	ng cycl	e			
Referre	d to in	LPO I (examination regulations	s for teaching-degree progra	mmes)	
§ 36 N § 38 N					
Module	appea	nrs in			
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		mination for the teaching			-

Module	e title				Abbreviation
Physics 3 for Primary and Secondary General School					11-L-SP3-152-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Physics and its D	idactics	Faculty of Physics a	ind Astronomy
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
5	1	rical grade			
Duratio		Module level	Other prerequisites		
1 semester undergraduate					
Conten	ts	0	1		
Physica	al conte	ents (optics, acoustics, A sciences in Grund- and H		ysics) relevant to cla	asses in Natural Sciences or tech
Intend	ed lear	ning outcomes			
classes demon	s in Gru stration	nd- and Hauptschule; kn n and pupils experiments	owledge of typical ap 5.	proaches to the imp	scientific or technical-scientific olementation and evaluation of
		number of weekly contact hours,	language — if other than Ger	man)	
V (3) +					
		sessment (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
	ige of a	ation in groups (groups o ssessment: German and blaces			
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Additio	onal Inf	ormation			
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150 h		_			
Teachi	ng cycl	e			
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		LPO I (examination regulation	s for teaching-degree progra	mmes)	
§ 361N § 381N					
Module		ars in			
	ate exa				





Extra Skills (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".



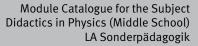


Physics (ECTS credits)

(Freier Bereich (general as well as subject-specific electives) -- subject specific)

Module title					Abbreviation	
Astrop	nysics				11-AP-152-m01	
Module	e coord	inator		Module offered by		
		ector of the Institute of	Theoretical Physics	Faculty of Physics a	nd Astronomy	
and Astrophysics						
ECTS		od of grading	Only after succ. con	npl. of module(s)		
6		rical grade				
Duratio		Module level	Other prerequisites			
1 seme	1 semester undergraduate					
History telesco um, mo lactic n	of astr pes an leculai uclei, l	onomy, coordinates an d detectors, stellar stru r clouds, structure of th arge-scale structures, c	cture and atmosphere e milky way, the local	s, stellar evolution a	nd end stages, inter	stellar medi-
		ning outcomes				
physica	al obse	are familiar with the mo rvations and evaluatior familiar with the physic	ns. They are able to use	e these methods to p	lan and analyse owr	n observati-
Course	S (type, n	umber of weekly contact hours	s, language — if other than Ge	rman)		
V (2) + Module		t in: German or English				
Method	d of ass	essment (type, scope, lang	uage — if other than German,	examination offered — if no	t every semester, informat	ion on whether
module is	creditab	le for bonus)				
b) oral e c) oral e d) proje e) prese If a writ stead ta of asse nation e Langua	examin examin ect repo entatio ten exa ake the ssmen date at ge of a	mination (approx. 90 to ation of one candidate ation in groups (groups ort (approx. 8 to 10 pag n/talk (approx. 30 mini amination was chosen a form of an oral examin t is changed, the lectur the latest. ssessment: German an	each (approx. 30 minu s of 2, approx. 30 minu es) or utes) as method of assessm nation of one candidate er must inform student	tes per candidate) o ent, this may be char e each or an oral exa	nged and assessmer mination in groups.	If the method
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Additio	nal inf	ormation				
Worklo	ad					
180 h						
Teachir	ıg cycl	8				
		LPO I (examination regulation	ons for teaching-degree progra	ammes)		
§ 22	-					
§ 22 § 22	-					
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Bachelor's degree (1 major) Physics (2015) Bachelor's degree (1 major) Mathematical Physics (2015) Bachelor's degree (1 major) Aerospace Computer Science (2015) Bachelor's degree (1 major, 1 minor) Physics (Minor, 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 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) Bachelor's degree (1 major) Mathematical Physics (2016) Master's degree (1 major) Nanostructure Technology (2016) Bachelor's degree (1 major) Aerospace Computer Science (2017) First state examination for the teaching degree Grundschule Physics (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018) First state examination for the teaching degree Realschule Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) Master's degree (1 major) Nanostructure Technology (2020) Bachelor's degree (1 major) Physics (2020) Bachelor's degree (1 major) Mathematical Physics (2020) Bachelor's degree (1 major, 1 minor) Physics (Minor, 2020) Bachelor's degree (1 major) Aerospace Computer Science (2020) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020) Master's degree (1 major) Quantum Technology (2021) exchange program Physics (2023) Bachelor's degree (1 major) Mathematical Physics (2024)

	e title				Abbreviation	
Prepara	atory C	ourse Mathematics			11-P-VKM-152-m01	
Module	e coord	inator		Module offered by		
		ectors of the Institute o	f Applied Physics and	Faculty of Physics a	nd Astronomy	
		f Theoretical Physics a				
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
2						
Duration Module level Other prerequisites						
1 seme		undergraduate				
Conten		undergraduate				
the intr 1. Basic 2. Coor 3. Vecto 4. Diffe	oducti c geom dinate ors - ve	on to and preparation f etry and algebra systems and complex ctored values calculus	entary calculation meth for the modules of Expe numbers			specially for
		ning outcomes				
	-		mathematics and elem	entary calculation m	ethods which are re	auired for
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			rs, language — if other than Ger			
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Additio	nal inf	ormation				
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 Worklo 50 h Feachin Referre § 22 § 22 § 22 § 22 Sachelo Bachelo Bachelo Bachelo First sta	ng cycl ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's de or's de or's de or's de ate exa ate exa	LPO I (examination regulat ars in gree (1 major) Physics gree (1 major) Nanostru gree (1 major) Mathem gree (1 major, 1 minor) mination for the teach mination for the teach	(2015) ucture Technology (201 atical Physics (2015) Physics (Minor, 2015) ing degree Grundschule ing degree Grundschule	5) e Physics (2015) e Didactics in Physics	s (Primary School) (2	2015)
 Worklo 60 h Teachin Teachin 7 8 22 II I 8 22 I 8 22 II I 8 22 I 8 22 I 8 22 I 8 22 I 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2	ng cycl ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's de or's de or's de or's de ate exa ate exa ate exa	LPO I (examination regulat ars in gree (1 major) Physics gree (1 major) Nanostru gree (1 major) Mathem gree (1 major, 1 minor) mination for the teach mination for the teach	(2015) ucture Technology (201 atical Physics (2015) Physics (Minor, 2015) ing degree Grundschule ing degree Grundschule ing degree Realschule F	5) e Physics (2015) e Didactics in Physics		2015)

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First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018)

First state examination for the teaching degree Realschule Physics (2018)

First state examination for the teaching degree Gymnasium Physics (2018)

First state examination for the teaching degree Mittelschule Physics (2018)

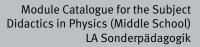
First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018)

Module title					Abbreviation		
Principles of Energy Technologies 11-ENT-152-m01							
Module	e coord	inator		Module offered by			
Manag	ing Dire	ector of the Institute of	Applied Physics	Faculty of Physics a	nd Astronomy		
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)			
6	nume	rical grade					
Duratio	on	Module level	Other prerequisites	;			
1 seme	ster	graduate					
Conten	Its	<u>.</u>					
as rene ting ma studen verters Electric	Physical principles of energy conservation and energy conversion, energy transport and energy storage as well as renewable resources of energy. We also discuss aspects of optimising materials (e.g. nanostructured insula- ting materials, selective layers, highly activated carbons). The course is especially suitable for teaching degree students. Energy conservation via thermal insulation. Thermodynamic energy efficiency. Fossil fired energy con- verters. Nuclear power plants. Hydroelectricity. Wind turbines. Photovoltaics. Solar thermal: Heat. Solar thermal: Electricity. Biomass. Geothermal energy. Energy storage. Energy transport						
	-	ning outcomes					
			different methods of er ne structures of corresp				
Course	S (type, r	number of weekly contact hour	rs, language — if other than Ge	rman)			
V (3) + Module		t in: German or English	I				
Metho	d of ass	sessment (type, scope, lang	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether	
module is	s creditab	le for bonus)					
 b) oral c) oral d) proje e) pressification stead to fasse nation Langua 	examir examin ect repo entatio tten exa ake the essmen date at age of a	ation in groups (group ort (approx. 8 to 10 pag n/talk (approx. 30 min amination was chosen e form of an oral exami	e each (approx. 30 minu s of 2, approx. 30 minu ges) or utes) as method of assessm nation of one candidate rer must inform studen nd/or English	ites per candidate) o ent, this may be char e each or an oral exa	nged and assessmer mination in groups.	If the method	
Allocat	ion of _l	places					
Additio	onal inf	ormation					
Worklo	ad						
180 h							
Teachi	ng cycl	e					
Referre	ed to in	LPO I (examination regulat	ions for teaching-degree progra	ammes)			
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Module	_	ars in					
	pädagogik	Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfacł		page 17 / 37	

UNIVERSITÄT WÜRZBURG

Bachelor's degree (1 major) Physics (2015) Bachelor's degree (1 major) Nanostructure Technology (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 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) Master's degree (1 major) Functional Materials (2016) First state examination for the teaching degree Grundschule Physics (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018) First state examination for the teaching degree Realschule Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) Bachelor's degree (1 major) Physics (2020) Bachelor's degree (1 major) Nanostructure Technology (2020) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020) Bachelor's degree (1 major) Quantum Technology (2021) Master's degree (1 major) Functional Materials (2022) exchange program Physics (2023) Master's degree (1 major) Functional Materials (2025)

Module title					Abbreviation	
Low Co	st - Hig	h Impact. Low-budget E	Experiments for Science	e Courses (Phy-	11-MIND-Ph1-152-m	01
sics)				· · ·	-	
Module	coord	inator		Module offered by		
holder	holder of the Chair of Physics and its Didactics			Faculty of Physics a	nd Astronomy	
ECTS		od of grading	Only after succ. com			
2		successfully completed				
Duratio	1	Module level	Other prerequisites			
		undergraduate				
1 semes		undergraduate				
Conten						
		d realisation of experim Ind secondary level I.	iental stations with or	dinary and inexpens	ive consumables for	classes of
Intende	ed learr	ning outcomes				
ry level content	l for sn s relev	develop simple scientifi nall groups from differen ant to the curriculum in	nt types of schools. In due consideration of t	doing so, they learn the target group.		
	5 (type, n	umber of weekly contact hours,	language — if other than Ger	man)		
S (2)						
		essment (type, scope, langu le for bonus)	age — if other than German, e	examination offered — if no	t every semester, informati	on on whether
b) oral (c) oral (examin examin	nination (approx. 45 mi ation of one candidate ation in groups (groups (approx. 8 pages)	each (approx. 10 minu	-		
Allocat	ion of p	olaces				
			_			
Additio	nal info	ormation				
This mo	dule is	designed for students	studying at least one s	subject in the natura	l sciences.	
Worklo	ad					
60 h						
Teachir	ng cycl	2				
reachin	15 cycl	-	_			
Poforro	d to in	LPO I (examination regulatio				
§ 22 N § 22 N § 22 N	Nr. 1 h) Nr. 2 f)		ns for teaching-degree progra	mmes)		
Module	appea	rs in				
First sta	ate exa	mination for the teachin mination for the teachin			s (Primary School) (2	015)
		mination for the teachin				
		mination for the teachin				
		mination for the teachin			nysics (Middle Schoo	1) (2015)
		mination for the teachin		•	(Middle Cabeel) ((A.F.)
		mination for the teachin		•		'15/
		mination for the teachin			(Driman, School) (-	019)
		mination for the teachin mination for the teachin		•	s (riiiiaiy School) (2	010)
	ädagogik	Didactics in Physics (Middle	JMU Würzburg • genera	ited 19-Apr-2025 • exam. reg. ik (Mittelschule-Didaktikfach		page 19 / 37



First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

LA Sonderpädagogik Didactics in Physics (Middle School) (2018)

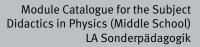
Module	e title				Abbreviation	
Teaching Science with Hands-on-Exhibits (Physics)					11-MIND-Ph2-152-m	101
Module coordinator				Module offered by		
holder of the Chair of Physics and its Didactics Faculty of Physics and Astronomy						
-					ind Astronomy	
ECTS		od of grading	Only after succ. com			
2		successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Designi	ing and	l creating hands-on exhil	oits for STEM subjects	5.		
Intende	ed lear	ning outcomes				
tents in ject-ori	and o ented v	evaluate the advantages ut of school. They plan a vork with pupils of secor	nd implement an intendary level I and II.	rdisciplinary science		
	S (type, r	number of weekly contact hours,	language — if other than Ger	man)		
S (2)						
		sessment (type, scope, langua le for bonus)	age — if other than German, e	examination offered — if no	ot every semester, informati	ion on whether
c) oral e	examin paper	ation of one candidate e ation in groups (groups o (approx. 8 pages) blaces		-		
Additio	nal inf	ormation	-			
		s designed for students s	tudving at least one s	subject in the natura	l sciences.	
Worklo						
60 h						
Teachir						
Teaciiii	ig cyci	e				
		LPO I (examination regulation	s for teaching-degree progra	mmes)		
§ 22 § 22 § 22	Nr. 2 f)					
Module	e appea	urs in				
First sta First sta First sta First sta First sta First sta First sta First sta First sta	ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	mination for the teaching mination for the teaching	g degree Grundschule g degree Realschule P g degree Gymnasium g degree Sonderpäda g degree Mittelschule g degree Mittelschule g degree Grundschule g degree Grundschule g degree Realschule P	Didactics in Physics Physics (2015) Physics (2015) gogik Didactics in Ph Physics (2015) Didactics in Physics Physics (2018) Didactics in Physics Physics (2018)	nysics (Middle Schoo 6 (Middle School) (20	ol) (2015) 015)
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First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

Module title					Abbreviation	
Teaching Seminar Fundamental Principles					11-L-EL1-152-m01	
Module	e coord	inator		Module offered by		
holder	of the (Chair of Physics and its	Didactics	Faculty of Physics a	nd Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
3	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
ception sed on pical so	ns and t specifi chool e	nterdisciplinary aspects typical learning difficult c contents of physics e xperiments and suitabl	ies, elementarisation a ducation, verbalisatior	and didactic reconst	ruction of physical co	ontents ba-
Intende	ed lear	ning outcomes				
studen	t preco	alitative knowledge of s nceptions and special r versity and school rega	nedia on relevant topi	cs; awareness of the		
Course	S (type, r	number of weekly contact hours	, language — if other than Ger	man)		
S (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) term paper (approx. 8 pages) or b) presentation (approx. 45 minutes) or c) written examination (approx. 45 minutes) or d) oral examination of one candidate each (approx. 15 minutes) or e) oral examination in groups (groups of 2, approx. 15 minutes per candidate) Language of assessment: German and/or English						
Allocat			<u> </u>			
Additio	nal inf	ormation				
Worklo	ad					
90 h						
Teachi	ng cycl	e				
		-				
Referre	d to in	LPO I (examination regulation	uns for teaching-degree progra	mmec)		
§ 22 § 22 § 22	Nr. 1 h) Nr. 2 f)			inines)		
Module	e appea	ars 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 Physics (2015) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015) LA Sonderpädagogik Didactics in Physics (Middle IMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Lehr- page 23 / 37						
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Module title				Abbreviation				
Selected Topics in Physics Didactics 11-L-EL2-152-m01								
Module coordinator				Module offered by				
chairperson of examination committee			26	Faculty of Physics a	nd Astronomy			
ECTS Method of grading				Only after succ. compl. of module(s)				
		successfully completed						
3 Duratio		Module level	Other prerequisites					
1 seme		undergraduate]					
Conten								
		in physics education.						
Intend	ed lear	ning outcomes						
		nave knowledge of a cu e according to subject-:				y the acqui-		
Course	S (type, r	umber of weekly contact hour	s, language — if other than Gei	rman)				
S (2)								
	d of ass	essment (type, scope, lang	uage — if other than German	examination offered — if no	t every semester informati	ion on whether		
		le for bonus)			t every semester, monnati			
		(approx. 8 pages) or						
		n (approx. 45 minutes)						
		nination (approx. 45 m ation of one candidate		tes) or				
		ation in groups (group)						
		ssessment: German an						
	tion of p							
Additic	nal inf	ormation						
Auunit								
Worklo	ad							
90 h								
-	ng cycl	e						
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	immes)				
§ 22	Nr. 1 h)							
§ 22								
§ 22								
	e appea							
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)								
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First state examination for the teaching degree Realschule Physics (2018)								
LA Sonder School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 25 / 37		



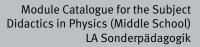
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LA Sonderpädagogik Didactics in Physics (Middle School) (2018)

Module title				Abbreviation			
Student Lab Supervision (Physics) 11-L-L3B-152-m01							
Module coordinator				Module offered by			
holder of the Chair of Physics and its Di		Didactics	Faculty of Physics a	nd Astronomy			
ECTS Method of grading Only after		Only after succ. con	after succ. compl. of module(s)				
2	(not) s	successfully completed					
Duratio	on	Module level	Other prerequisites	Other prerequisites			
1 seme	ster	undergraduate					
Conten	its						
		rovides an introduction g-learning-laboratory.	to successful supervis	ion of pupils indepe	ndently carrying out	experiments	
Intend	ed learr	ning outcomes					
vel of p experir ly and o ve beh terns b	The students learn to classify different groups of pupils according to their subject-specific and experimental level of performance, to support the pupils according to their needs and age and to help them during independent experimenting (supervision competencies in open classroom situations). The students are able to methodically and critically evaluate their own actions. A lecturer gives individual feedback to the students to avoid negative behaviour patterns and to support the students' strengths. The students develop professional behaviour patterns by repeatedly working on the same topic with different groups of pupils (reflection competencies and self-control competencies).						
Course	S (type, n	umber of weekly contact hours	, language — if other than Gei	man)			
P (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)							
b) oral c) oral	 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) 						
Allocat	ion of p	olaces					
Additio	onal info	ormation					
This m	odule is	s designed for students	studying at least one	subject in the natura	l sciences.		
Worklo	ad						
60 h							
Teachi	ng cycl	e					
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	mmes)			
§ 22 Nr. 1 h) § 22 Nr. 2 f) § 22 Nr. 3 f)							
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 Physics (2015) First state examination for the teaching degree Mittelschule Physics (2015)							
LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 27 / 37	

First state examination for the teaching degree Grundschule Physics (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018) First state examination for the teaching degree Realschule Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

Module title				Abbreviation		
Current Topics of Teaching Concepts in Physics 11-L-APD-152-m01						
Module coordinator				Module offered by		
chairperson of examination committee			ee	Faculty of Physics a	nd Astronomy	
ECTS Method of grading Only after succ. compl. of mo				,		
3	1	rical grade				
Duratio		Module level	Other prerequisites			
	-					
1 seme		undergraduate				
Conter						
		in physics education.				
	-	ning outcomes				
		have knowledge of a cu e according to subject-				fy the acqui-
Course	S (type, i	number of weekly contact hour	s, language — if other than Ge	rman)		
S (2) Module	e taugh	t in: German or English				
Metho	d of as	sessment (type, scope, lang		examination offered — if no	t every semester, informat	ion on whether
	-		:			
		mination (approx. 45 m nation of one candidate		ites) or		
		ation in groups (group			r	
d) term	n paper	(approx. 8 pages) or				
e) talk	(30 to 4	45 minutes) with discus	sion			
Allocat	tion of	places				
Additio	onal inf	ormation				
Worklo	ad					
90 h	-					
-	ng cycl	e				
Poforra	ad to in	LPOI (examination regulati	and for toaching dograp progr	mmac)		
	Nr. 1 h)			annies)		
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§ 22						
Modul	e appea	ars in				
			ng degree Grundschule	e Physics (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 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)						
	First state examination for the teaching degree Grundschule Physics (2018)					
First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018)						
First state examination for the teaching degree Realschule Physics (2018)						
LA Sonder School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfacł		page 29 / 37



First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

LA Sonderpädagogik Didactics in Physics (Middle School) (2018)

Module title					Abbreviation		
Scientific Work in Teaching Concepts 11-L-WPD-152-mo1							
Module coordinator				Module offered by			
Managing Director of the Institute of Ap			Applied Physics	Faculty of Physics a	nd Astronomy		
ECTS Method of grading			Only after succ. con	<u> </u>	ind /istronomy		
3		successfully completed					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate					
Conten	Its						
Current	t topics	in scientific work in phy	ysics education				
Intende	ed lear	ning outcomes					
	-	have knowledge of a cu		nhysics education ar	nd are able to proces	s questions	
		ucation on the basis of s				o questions	
Course	S (type, r	number of weekly contact hours	, language — if other than Ge	rman)			
S (2)							
	e taugh	t in: German or English					
Metho	d of ass	Sessment (type, scope, langu	lage — if other than German,	examination offered — if no	t every semester, informati	on on whether	
		le for bonus)					
talk (30	o to 45	minutes)					
Allocat	-						
Additio	nalinf	ormation					
Additio	nat illi						
Worklo	ad						
90 h							
Teachi	ng cycl	e					
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	ammes)			
§ 22	Nr. 1 h)						
§ 22	-						
§ 22	Nr. 3 f)						
Module	e appea	ars in					
		mination for the teachir	ng degree Grundschule	e Physics (2015)			
		mination for the teachir		-	s (Primary School) (2	015)	
First sta	ate exa	mination for the teachir	ng degree Realschule I	Physics (2015)			
First sta	ate exa	mination for the teachir	ıg degree Gymnasium	Physics (2015)			
		mination for the teachir	,		nysics (Middle Schoo	ol) (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)							
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				•	s (Primary School) (2	018)	
		mination for the teachir		•			
		mination for the teachir mination for the teachir		•			
	First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018)						
First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018)							
		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg.		page 31 / 37	
School) (20				gik (Mittelschule-Didaktikfach			

Julius-Maximilians-UNIVERSITÄT WÜRZBURG

First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020)

Module title				Abbreviation			
Current Topics in Physics				11-LX6-152-m01			
Module coordinator				Module offered by			
chairperson of examination committee			ee	Faculty of Physics a	nd Astronomy		
ECTS Method of grading Only			Only after succ. con	npl. of module(s)			
6	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee re	equired.		
Conten	ts		,		1		
		in physics.					
		ning outcomes					
The stu lation r know tl	idents l nethod he appl	have knowledge of a cu s necessary to acquire lication areas.	rrent subdiscipline of this knowledge. They a	re able to classify th			
		number of weekly contact hour	s, language — if other than Ge	man)			
V (3) +	R (1)						
		sessment (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informati	ion on whether	
b) oral c) oral d d) proje e) pres If a writ stead t of asse nation Langua Allocat	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may in- stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami- nation date at the latest. Language of assessment: German and/or English Allocation of places Additional information						
Worklo	ad						
180 h							
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)			
Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f)							
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 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 Physics (2015)First state examination for the teaching degree Mittelschule Physics (2015)First state examination for the teaching degree Mittelschule Physics (2015)First state examination for the teaching degree Mittelschule Physics (2015)First state examination for the teaching degree Mittelschule Physics (2015)First state examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)First State examination for the teaching degree Mittelschule Physics (2015)<							
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First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015) First state examination for the teaching degree Grundschule Physics (2018) First state examination for the teaching degree Realschule Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020) First state examination for the teaching degree Mittelschule Physics (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020)

Module title					Abbreviation		
Selected Topics of Physics 11-LCS6-152-mo1							
Module coordinator				Module offered by			
chairperson of examination committee			ee	Faculty of Physics and Astronomy			
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
4	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee re	equired.		
Conten	ts						
Current study a	•	in experimental physic	cs. Credited academic a	achievements, e.g. ir	ι case of change of ι	university or	
Intende	ed lear	ning outcomes					
sics of t underst classify	the Bao tand th • the su	chelor's programme. Th e measuring and/or ev bject-specific contexts	encies corresponding t ley have knowledge of aluation methods nece and know the applicat	a current subdiscipli essary to acquire this ion areas.	ne of Experimental I	Physics and	
		number of weekly contact hour	s, language — if other than Ger	man)			
V (2) +							
		s essment (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informat	ion on whether	
d) proje e) prese If a writ stead ta of asse nation Langua	 c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English 						
Allocat	ion of p	olaces					
			_				
Additio	nal inf	ormation					
 Worklo	ad						
120 h							
Teachir	ıg cycl	e					
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)			
§ 22 § 22 § 22	Nr. 2 f)						
Module	e appea	ars in					
First sta First sta	ate exa ate exa	mination for the teachi mination for the teachi	ng degree Grundschule ng degree Grundschule ng degree Realschule F ng degree Gymnasium	Didactics in Physics Physics (2015)	5 (Primary School) (2	2015)	
LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 35 / 37	
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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) First state examination for the teaching degree Grundschule Physics (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018) First state examination for the teaching degree Realschule Physics (2018) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Mittelschule Physics (2018) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018) First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020) First state examination for the teaching degree Grundschule Physics (2020) First state examination for the teaching degree Gymnasium Physics (2020) First state examination for the teaching degree Realschule Physics (2020) First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020)





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.