

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: 2020 Responsible: Faculty of Physics and Astronomy

JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record L6|873|-|-|H|2020

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The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	20	5
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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)):

19-Feb-2020 (2020-20)

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.



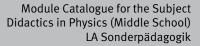


Compulsory Courses

(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 Teaching Concepts 11-L-PD-172-m01								
Module coordinator				Module offered by				
holder of the Chair of Physics and its Didactics				Faculty of Physics a	nd Astronomy			
ECTS Method of grading Only after succ. compl. of module(s)								
5	nume	rical grade						
Duratio	n	Module level	Other prerequisites					
2 seme	ster	undergraduate						
Conten	ts							
of the d subject sics cor typical these; d	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;							
Intende	ed lear	ning outcomes						
They cle familia	early di r with s	amiliar with central ph ifferentiate didactic asp ubject-specific student uss specific teaching co	ects of physics lesson conceptions and their	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	rman)				
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		sessment (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, information	on on whether		
b) oral (c) oral (d) term	examir examin paper	mination (approx. 60 m ation of one candidate ation in groups (groups (approx. 8 pages) ssessment: German an	each (approx. 15 minu 5 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 regulation	ons for teaching-degree progra	immes)				
§ 36 N § 38 N § 53 N § 77 N	lr. 7 lr. 1 r. 2							
Module	e appea	in and a second s						
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LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 6 / 37		



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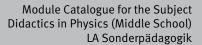
LA Sonderpädagogik Didactics in Physics (Middle School) (2020)

Module	e title				Abbreviation
Physics	s 1 for F	Primary and Secondary G	General School		11-L-SP1-152-m01
Module coordinator				Module offered by	l
holder	of the (Chair of Physics and its D	idactics	Faculty of Physics a	and Astronomy
ECTS		od of grading	Only after succ. con		,
5		rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate			
Conten	ts				
		ents (mechanics, thermo und- and Hauptschule.	dynamics) relevant to	o classes in Natural S	Sciences or technical-natural
		ning outcomes			
 Oualita	tive kn	owledge of the physical	nrinciples of school-r	elevant contents of	scientific or technical-scientific
					plementation and evaluation of
		n and pupils experiments		. r	
Course	S (type, n	umber of weekly contact hours,	language — if other than Ge	rman)	
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	e title				Abbreviation
Physics 2 for Primary and Secondary General School11-L-SP2-152-m01					11-L-SP2-152-m01
Module coordinator Module offered by					
holder	of the (Chair of Physics and its D	idactics	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade		-	
Duratio		Module level	Other prerequisites		
1 seme	ster	undergraduate			
Conten	ts		<u>I</u>		
Physica	al conte	ents (science of electricity und- and Hauptschule.	y, electronics) releva	nt to classes in Natu	ral Sciences or technical-natural
		ning outcomes			
classes demon	s in Gru stration	nd- and Hauptschule; kn n and pupils experiments	owledge of typical ap	pproaches to the imp	scientific or technical-scientific olementation and evaluation of
		umber of weekly contact hours, I	anguage — if other than Gei	rman)	
V (3) +					
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether
	ge of a	ation in groups (groups o ssessment: German and blaces		tes per candidate)	
Additio	nal inf	ormation			
Worklo	ad				
150 h					
Teachi	ng cycl	e			
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	immes)	
§ 36 N § 38 N					
Module	e appea	urs in			
	ate exa	mination for the teaching mination for the teaching mination for the teaching		•	s (Primary School) (2015)

Module	e title				Abbreviation
Physics 3 for Primary and Secondary General School11-L-SP3-152-m01					11-L-SP3-152-m01
Module coordinator 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 seme	ster	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			
 A J J 4 4 4		4!			
Additio	onal Inf	ormation			
Worklo					
150 h		_	-		
Teachi	ng cycl	e			
 Doform	d to in				
		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".





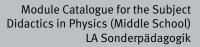
Physics (ECTS credits)

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

Module	e title				Abbreviation		
Teaching Seminar Fundamental Principles 11-L-EL1-152-m01							
Module coordinator Modu				Module offered by	Module offered by		
holder	of the (Chair of Physics and its	Didactics	Faculty of Physics a	nd Astronomy		
ECTS Method of grading Only after succ. compl. of module(s)							
3	(not) s	successfully completed					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate					
Conten	ts	<u>.</u>					
ceptior sed on	ns and i specifi	nterdisciplinary aspect typical learning difficult c contents of physics e xperiments and suitabl	ies, elementarisation ducation, verbalisation	and didactic reconst	ruction of physical c	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 Ge	rman)			
S (2)							
a) term b) pres c) writt d) oral e) oral Langua	paper entatio en exar examir examir ge of a	sessment (type, scope, lang ole for bonus) (approx. 8 pages) or on (approx. 45 minutes) mination (approx. 45 mi nation of one candidate nation in groups (groups sssessment: German an	or inutes) or each (approx. 15 minu s of 2, approx. 15 minu	ites) or	it every semester, informati	on on whether	
Allocat	ion of p	places					
Additio	nal inf	ormation					
Worklo	ad						
90 h							
Teachi	ng cycl	e					
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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	
Selected Topics in Physics Didactics 11-L-EL2-152-m01						
Module coordinator Module offered by						
chairperson of examination committee Faculty of Physics and 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-s				y the acqui-
Course	S (type, r	umber of weekly contact hours	s, language — if other than Ge	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, mormati	on on whether
		(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				
Auditic						
Worklo	ad					
90 h						
-	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	immes)		
-	Nr. 1 h)					
§ 22						
§ 22						
	e appea					
		mination for the teachi				
		mination for the teachi			6 (Primary School) (2	.015)
		mination for the teachi		•		
		mination for the teachi		•		
		mination for the teachi mination for the teachi	,		iysics (Milaale Schoo	JIJ (2015)
		mination for the teachi			(Middle School) (ac	D15)
		mination for the teachi		•		/-J/
		mination for the teachi			s (Primary School) (2	018)
		mination for the teachi				
			18.011.14.00 1		date was 11.1	(
LA Sonder School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 15 / 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) (2020)

	e title				Abbreviation	
MINT Preparatory Course Mathematical Methods of Physic				S	11-P-VKM-202-m01	
Module coordinator				Module offered by	J	
		ectors of the Institute of A f Theoretical Physics and		Faculty of Physics a	and Astronomy	
ECTS	1	od of grading	Only after succ. con	npl. of module(s)		
3	1	successfully completed				
Duratio		Module level	Other prerequisites	•		
1 seme		undergraduate				
introdu 1. Basic quantit	iction a c geom ties, 5.	basics and elementary of nd preparation for the m etry and algebra, 2. diffe coordinate systems, 6. co	odules of experiment rential calculus and s	tal and theoretical p	hysics.	
		ning outcomes				
		n command of knowledg				ulus as re-
-		successful start into the	· · · ·		onysics.	
		number of weekly contact hours,	language — if other than Ge	rman)		
V(1) + I	• •	t in: German or English				
	_					1 - 41
		sessment (type, scope, langua le for bonus)	ige — If other than German,	examination offered — If h	ot every semester, informati	on on wnether
	-					
arexer			annrox 50% of annr	ox 6 exercise sheet	s) or	
		x. 15 minutes)	approx. 50% of appr	ox. 6 exercise sheet	s) or	
b) talk	(approx			ox. 6 exercise sheet	s) or	
b) talk	(approx ment o	x. 15 minutes) ffered: Once a year, wint		ox. 6 exercise sheet	s) or	
b) talk Assess	(approx ment o	x. 15 minutes) ffered: Once a year, wint		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat	(approx ment o ion of p	x. 15 minutes) ffered: Once a year, wint		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat	(approx ment o ion of p	x. 15 minutes) ffered: Once a year, wint blaces		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat Additio 	(approx ment o ion of p mal inf	x. 15 minutes) ffered: Once a year, wint blaces		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat Additio Worklo	(approx ment o ion of p mal inf	x. 15 minutes) ffered: Once a year, wint blaces		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat Additio Worklo 90 h	(appro: ment o ion of p mal info	x. 15 minutes) ffered: Once a year, wint places ormation		ox. 6 exercise sheet	s) or	
b) talk Assess Allocat Additio Worklo 90 h Teachin	(appro: ment o ion of p mal inf ad	x. 15 minutes) ffered: Once a year, wint places ormation	er semester	ox. 6 exercise sheet	s) or	
b) talk Assess Allocat Additio Worklo 90 h Teachin Teachin	(appro: ment o ion of p onal info ad ng cycle	x. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem	er semester ester		s) or	
b) talk Assess Allocat Additio Worklo 90 h Teachin Teachin Referre	(approz ment o ion of p onal info ad ng cycle ed to in	x. 15 minutes) ffered: Once a year, wint places ormation	er semester ester		s) or	
b) talk Assess Allocat Additio 90 h Teachin Teachin Referre § 22 II	(approz ment o ion of p onal info ad ng cycle ed to in Nr. 1 h)	x. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem	er semester ester		s) or	
b) talk Assess Allocat Additio 90 h Teachin Teachin Referre § 22 § 22	(approz ment o ion of p onal info pad ng cycle ed to in Nr. 1 h) Nr. 2 f)	x. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem	er semester ester		s) or	
b) talk Assess Allocat Additio 90 h Teachin Teachin Referre § 22 § 22	(approz ment o ion of p onal inf ad ng cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f)	k. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem LPO I (examination regulation	er semester ester		s) or	
b) talk Assess Allocat Additio 90 h Teachin Teachin § 22 II I § 22 II I § 22 II I § 22 II I	(approz ment o ion of p onal info nad ng cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea	x. 15 minutes) ffered: Once a year, wint olaces ormation e e: every year, winter sem LPO I (examination regulation	er semester ester s for teaching-degree progra		s) or	
b) talk Assess Allocat Worklo 90 h Teachin Teachin § 22 § 22 § 22 § 22 Bachel	(appro: ment o ion of p mal inf ad ad ag cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's des	x. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem LPO I (examination regulation ars in gree (1 major) Physics (20	er semester ester s for teaching-degree progra	ammes)	s) or	
b) talk Assess Allocat Morklo 90 h Teachin Teachin § 22 II I § 22 II I § 22 II I § 22 II I § 22 II I Bachel Bachel	(appro: ment o ion of p onal inf ad ad ag cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's de or's de	x. 15 minutes) ffered: Once a year, wint olaces ormation e e: every year, winter sem LPO I (examination regulation	er semester ester s for teaching-degree progra	ammes)	s) or	
b) talk Assess Allocat Additio Worklo 90 h Teachin Teachin Referre § 22 II § 22 II § 22 II § 22 II § 22 II S 22 II S 22 II S 22 II S 22 II S 22 II S 22 II	(approz ment o ion of p onal info ad ad ad ag cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's de or's de or's de	k. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem LPO I (examination regulation urs in gree (1 major) Physics (20 gree (1 major) Nanostruc	er semester ester s for teaching-degree progra 020) ture Technology (202 ical Physics (2020)	ammes)	s) or	
b) talk Assess Allocat Worklo 90 h Teachin Teachin § 22 II I § 22 II I § 22 II I § 22 II I § 22 II I Bachel Bachel Bachel First sta	(appro: ment o ion of p mal inf ad ad ad ad ad ad ad ad ad ad ad ad ad	k. 15 minutes) ffered: Once a year, wint places ormation e e e: every year, winter sem LPO I (examination regulation gree (1 major) Physics (24) gree (1 major) Nanostruc gree (1 major) Mathemat gree (1 major, 1 minor) Ph mination for the teaching	er semester ester s for teaching-degree progra 020) ture Technology (202 ical Physics (2020) nysics (Minor, 2020) g degree Grundschuld	ammes) :0)		020)
b) talk Assess Allocat Additio 90 h Teachin Teachin § 22 II I § 22 II I § 22 II I § 22 II I § 22 II I S 22 I S	(approz ment o ion of p onal info ad ng cycle ed to in Nr. 1 h) Nr. 2 f) Nr. 3 f) e appea or's deg or's deg or's deg or's deg ate exa ate exa	k. 15 minutes) ffered: Once a year, wint places ormation e e: every year, winter sem LPO I (examination regulation gree (1 major) Physics (2) gree (1 major) Nanostruc: gree (1 major) Mathemat gree (1 major, 1 minor) Ph mination for the teaching mination for the teaching	er semester ester s for teaching-degree progra 020) ture Technology (202 ical Physics (2020) nysics (Minor, 2020) g degree Grundschuld g degree Grundschuld	ammes) e Didactics in Physic e Physics (2020)		020)
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b) talk Assess Allocat Additio Worklo 90 h Teachin Teachin § 22 II § 22 II § 22 II § 22 II § 22 II § 22 II Bachel Bachel Bachel Bachel First sta First sta First sta	(approz ment o ion of p onal info ad ng cycle 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 ate exa ate exa	k. 15 minutes) ffered: Once a year, wint olaces ormation e e e: every year, winter sem LPO I (examination regulation gree (1 major) Physics (20) gree (1 major) Nanostruc: gree (1 major) Mathemat gree (1 major) Mathemat gree (1 major, 1 minor) Ph mination for the teaching mination for the teaching mination for the teaching mination for the teaching mination for the teaching	er semester ester s for teaching-degree progra o20) ture Technology (202 ical Physics (2020) nysics (Minor, 2020) g degree Grundschuld g degree Grundschuld g degree Gymnasium g degree Realschule F	ammes) ammes) e Didactics in Physic e Physics (2020) Physics (2020) Physics (2020)	s (Primary School) (2	
b) talk Assess Allocat Additio 90 h Teachin Teachin Referre § 22 II § 22 II § 22 II § 22 II § 22 II Bachel Bachel Bachel Bachel First sta First sta First sta First sta	(approz ment o ion of p onal info ad ag cycle 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 ate exa ate exa ate exa	k. 15 minutes) ffered: Once a year, wint olaces ormation e e e: every year, winter semu- LPO I (examination regulation gree (1 major) Physics (2- gree (1 major) Nanostrucc gree (1 major) Mathemat gree (1 major) Mathemat gree (1 major, 1 minor) Ph mination for the teaching mination for the teaching mination for the teaching mination for the teaching	er semester ester s for teaching-degree progra ical Physics (2020) nysics (Minor, 2020) g degree Grundschuld g degree Grundschuld g degree Realschule I g degree Realschule I g degree Sonderpäda	ammes) ammes) e Didactics in Physic e Physics (2020) Physics (2020) Physics (2020)	s (Primary School) (2	



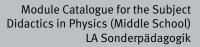


First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020) First state examination for the teaching degree Mittelschule Physics (2020) Bachelor's degree (1 major) Quantum Technology (2021) Bachelor's degree (1 major) Mathematical Physics (2024)

Module title Abbreviation					
Student	Student Lab Supervision (Physics) 11-L-L3B-152-m01				
Module	coordinator		Module offered by		
holder	of the Chair of Physics and its I	Didactics	Faculty of Physics a	nd Astronomy	
ECTS	Method of grading	Only after succ. con	npl. of module(s)		
2	(not) successfully completed				
Duratio	n Module level	Other prerequisites			
1 semes	ster undergraduate				
Content	ts				
	dule provides an introduction t eaching-learning-laboratory.	o successful supervis	ion of pupils indepe	ndently carrying out	experiments
Intende	ed learning outcomes				
vel of per experiment ly and convertient ve behand terns by	dents learn to classify different erformance, to support the pup nenting (supervision competen critically evaluate their own act aviour patterns and to support y repeatedly working on the sat competencies).	bils according to their cies in open classroo ions. A lecturer gives i the students' strength	needs and age and t m situations). The st ndividual feedback t is. The students deve	o help them during i udents are able to m to the students to av elop professional be	independent ethodical- oid negati- haviour pat-
Courses	5 (type, number of weekly contact hours,	language — if other than Ger	man)		
P (2)					
	l of assessment (type, scope, langu creditable for bonus)	age — if other than German, o	examination offered — if no	t every semester, information	on on whether
b) oral e c) oral e	en examination (approx. 45 min examination of one candidate of examination in groups (groups paper (approx. 8 pages)	each (approx. 10 minu			
Allocati	ion of places				
Additio	nal information				
This mo	dule is designed for students	studying at least one s	subject in the natura	l sciences.	
Worklo	ad				
60 h					
Teachin	ng cycle				
Referre	d to in LPO I (examination regulation	ns for teaching-degree progra	mmes)		
§ 22 N § 22 N § 22 N	Nr. 2 f)				
Module	appears in				
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LA Sonderp School) (20	ädagogik Didactics in Physics (Middle 20)		ated 19-Apr-2025 • exam. reg. zik (Mittelschule-Didaktikfach		page 19 / 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	Module title Abbreviation					
Low Cost - High Impact. Low-budget Experiments for Science Courses (Phy-					11-MIND-Ph1-152-m	01
sics)						
Module	coord	inator	Module offered by	odule offered by		
holder	of the (Chair of Physics and its I	Didactics	Faculty of Physics a	nd Astronomy	
ECTS	Metho	od of grading	Only after succ. com			
2		successfully completed				
Duratio		Module level	Other prerequisites			
1 semes		undergraduate				
		undergraduate				
Conten						
		d realisation of experim	iental stations with or	dinary and inexpens	ive consumables for	classes of
Intende	ed learn	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 he target group.		
Courses	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	-		
Allocati	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	_			
	3 -)	-				
Referre	d to in	LPOI (examination regulatio	ns for toaching dogroo progra	mmoc)		
§ 22 N § 22 N § 22 N	Nr. 1 h) Nr. 2 f)					
Module						
		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			iysics (Middle Schoo	01) (2015)
		mination for the teachin		-	(Middle School) ((15)
		mination for the teachin		•		15)
		mination for the teachin		•	(Drimany School) (a	018)
		mination for the teachin mination for the teachin			s (Fillialy School) (2	010)
	ädagogik	Didactics in Physics (Middle	JMU Würzburg • genera	ited 19-Apr-2025 • exam. reg. ik (Mittelschule-Didaktikfach		page 21 / 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)

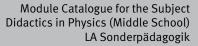
LA Sonderpädagogik Didactics in Physics (Middle School) (2020)

Module	title				Abbreviation	
Teaching Science with Hands-on-Exhibits (Physics)					11-MIND-Ph2-152-m	01
Module coordinator				Module offered by		
holder of the Chair of Physics and its Didactics				Faculty of Physics a	nd Astronomy	
ECTS Method of grading Only after succ. compl. of module(s)					ind /istronomy	
		successfully completed	Only after sace. con			
2 Duratio		Module level	Other prerequisites			
1 semes		undergraduate				
Conten		undergraduite	1			
		l creating hands-on exhil				
		ning outcomes				
tents in	and o	evaluate the advantages ut of school. They plan a vork with pupils of secor	nd implement an inte			
Courses	5 (type, r	umber of weekly contact hours,	anguage — if other than Ger	man)		
S (2)						
		essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, informati	on on whether
b) oral e c) oral e d) term	examir examin paper	nination (approx. 45 min ation of one candidate e ation in groups (groups ((approx. 8 pages)	ach (approx. 10 minu	-		
Allocati	ion of p	llaces				
		ormation				
		s designed for students s	tudying at least one s	subject in the natura	l sciences.	
Worklo	ad					
60 h						
Teachir	ıg cycl	8				
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		
§ 22 N	-					
§ 22 N	-					
§ 22						
Module						
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	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	Didactics in Physics Physics (2015) Physics (2015) gogik Didactics in Ph Physics (2015) Didactics in Physics Physics (2018) Didactics in Physics	nysics (Middle Schoo (Middle School) (20	DI) (2015) D15)
	ädagogik	mination for the teaching	JMU Würzburg • genera	Physics (2018) Ited 19-Apr-2025 • exam. reg ik (Mittelschule-Didaktikfach		page 23 / 37

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 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		
Astrophysics				11-AP-152-m01		
Module coordinator			Module offered by			
-	-	ector of the Institute of	Theoretical Physics	Faculty of Physics a	nd Astronomy	
and Ast			_			
ECTS		od of grading	Only after succ. con	npl. of module(s)		
6		rical grade				
Duratio	n	Module level	Other prerequisites	i		
1 seme		undergraduate				
Conten						
telesco um, mo	pes an Ieculai	d detectors, stellar stru	Id time measurement, f acture and atmosphere re milky way, the local cosmology.	s, stellar evolution a	nd end stages, inter	stellar medi-
Intende	ed leari	ning outcomes				
physica	al obse	rvations and evaluation	odern world view of Ast ns. They are able to use cs and development of	e these methods to p	lan and analyse owr	n observati-
		umber of weekly contact hour	s, language — if other than Ge	rman)		
V (2) + I Module		t in: German or English				
Method	l of ass	essment (type, scope, lang	guage — if other than German,	examination offered — if no	t every semester, informati	ion on whether
· · · · · · · · · · · · · · · · · · ·		le for bonus)				
 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 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 						
Allocation of places						
Additional information						
Workload						
180 h						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
§ 22 N						
§ 22 Nr. 2 f) § 22 Nr. 3 f)						
Module appears in						
			[A4113475]	atad to Apr	data yasand Labu	
LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 25 / 37

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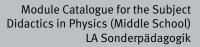
Bachelor's degree (1 major) Physics (2015) Bachelor's degree (1 major) Mathematical Physics (2015) Bachelor's degree (1 major) Aerospace Computer Science (2015) Bachelor's degree (1 major, 1 minor) Physics (Minor, 2015) First state examination for the teaching degree Grundschule Physics (2015) First 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)

Module title Abbreviation					Abbreviation		
Principles of Energy Technologies 11-ENT-152-mo1							
Module coordinator				Module offered by	Module offered by		
Managing Director of the Institute of Ap		Applied Physics	Faculty of Physics a	nd Astronomy			
ECTS	Metho	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	ts						
as rene ting ma studen verters Electric	ewable aterials ts. Ene . Nucle tity. Bic	resources of energy. W , selective layers, high rgy conservation via th ar power plants. Hydro omass. Geothermal ene	vation and energy conv le also discuss aspects ly activated carbons). T ermal insulation. Therr electricity. Wind turbin ergy. Energy storage. Er	of optimising materi he course is especia nodynamic energy ef es. Photovoltaics. So	ials (e.g. nanostructu lly suitable for teach ficiency. Fossil fired	ured insula- ing degree energy con-	
		ning outcomes					
			different methods of en ne structures of corresp				
Course	S (type, r	number of weekly contact hour	s, language — if other than Ge	rman)			
V (3) + Module		t in: German or English					
			guage — if other than German,	examination offered — if no	ot everv semester, informati	ion on whether	
		le for bonus)			····,·· ···, ···		
b) oral c) oral d) proje e) pres If a writ stead t of asse nation Langua Assess	 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 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 Assessment offered: Once a year, winter semester 						
Allocat	Allocation of places						
Additional information							
Workload							
180 h							
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
§ 22	-						
§ 22 Nr. 2 f) § 22 Nr. 3 f)							
	Module appears in						
						· · · · ·	
LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		page 27 / 37	

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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							
Current Topics of Teaching Concepts in Physics 11-L-APD-152-m01							
Module coordinator				Module offered by			
chairp	erson o	f examination committe	ee	Faculty of Physics a	nd Astronomy		
ECTS	1	od of grading	Only after succ. con		,		
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, 1	number of weekly contact hour	s, language — if other than Ge	rman)			
S (2) Modul	e taugh	t in: German or English					
Metho	d of as	Sessment (type, scope, lang ole for bonus)		examination offered — if no	ot 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					
 Referred to in LPO I (examination regulations for teaching-degree programmes)							
				annies)			
§ 22 Nr. 1 h) § 22 Nr. 2 f)							
§ 22 II Nr. 3 f)							
Modul	e appea	ars in					
		mination for the teachi	ng degree Grundschule	e 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)						
		mination for the teachi			6 (Middle School) (20	015)	
		mination for the teachi					
	First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018) First state examination for the teaching degree Realschule Physics (2018)						
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LA Sonder School) (2		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg gik (Mittelschule-Didaktikfach		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) (2020)

Module title Abbreviation						
Scientific Work in Teaching Concepts 11-L-WPD-152-m01						
Module coordinator				Module offered by		
Manag	ing Dire	ector of the Institute of A	Applied Physics	Faculty of Physics a	nd Astronomy	
ECTS	1	od of grading	Only after succ. con	<u> </u>	ind / iscience in y	
3		successfully completed				
Duratio		Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Current	t topics	in scientific work in phy	ysics education			
Intend	ed lear	ning outcomes				
The stu	dents	have knowledge of a cu	rrent subdiscipline of	physics education ar	nd are able to proces	s questions
		ucation on the basis of s				
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	mat iiii					
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				
First st	ate exa	mination for the teachir	ig degree Grundschule	e Physics (2015)		
First st	ate exa	mination for the teachir	ng degree Grundschule	e Didactics in Physics	s (Primary School) (2	015)
First st	ate exa	mination for the teachir	ng degree Realschule I	Physics (2015)		
First st	ate exa	mination for the teachir	ıg 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)						
		mination for the teachir		-		0)
		mination for the teachir		•	s (Primary School) (2	018)
		mination for the teachir		•		
		mination for the teachir		•		
		mination for the teachir			weice (Middle Cake	(2040)
		mination for the teachir mination for the teachir	,			
				-		
LA Sonderp School) (20		Didactics in Physics (Middle		ated 19-Apr-2025 • exam. reg. gik (Mittelschule-Didaktikfach		page 31 / 37

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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	e coord	inator		Module offered by		
chairpe	erson o	f examination committe	ee	Faculty of Physics a	nd Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee re	equired.	
Conten	ts	0				
		in physics.				
		ning outcomes				
The stu lation n know th	dents nethod he app	have knowledge of a cu s necessary to acquire lication areas.	this knowledge. They a	are able to classify th		
		number of weekly contact hour	s, language — if other than Ge	rman)		
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) press If a writ stead ta of asse nation Langua	examir examin ect repo entatio tten exa ake the ssmen date at <u>ige of a</u> ion of j	mination (approx. 90 to hation of one candidate ation in groups (groups ort (approx. 8 to 10 pag n/talk (approx. 30 min amination was chosen form of an oral examin t is changed, the lectur the latest. ssessment: German an places	e each (approx. 30 minu s of 2, approx. 30 minu es) or utes) as method of assessme 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
Worklo	ad					
180 h						
Teachi	ng cvcl	e				
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	ammes)		
§ 22 § 22 § 22 § 22	Nr. 1 h) Nr. 2 f)	LPOT (examination regulati	ons for teaching-degree progra	immes)		
Module	e appea	ars in				
First sta First sta First sta First sta First sta LA Sonderp	ate exa ate exa ate exa ate exa ate exa ^{adagogik}	mination for the teachi mination for the teachi Didactics in Physics (Middle	ng degree Grundschule ng degree Realschule F ng degree Gymnasium ng degree Sonderpäda ng degree Mittelschule	e Didactics in Physics Physics (2015) Physics (2015) gogik Didactics in Ph Physics (2015) ated 19-Apr-2025 • exam. reg	nysics (Middle Schoo . data record Lehr-	
School) (20			amt Sonderpädagog	gik (Mittelschule-Didaktikfach	n) Physik - 2020	



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	coord	inator		Module offered by		
chairpe	rson of	f examination committ	ee	Faculty of Physics a	nd Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
4	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	undergraduate	Approval from exam	ination committee re	equired.	
Content	ts					
Current study a	•	in experimental physi	cs. Credited academic a	achievements, e.g. ir	ι case of change of ι	university or
Intende	ed learr	ning outcomes				
sics of t underst classify	the Bac tand th the su	chelor's programme. Th e measuring and/or ev bject-specific contexts	encies corresponding t ney have knowledge of valuation methods nece and know the applicat s, language — if other than Ger	a current subdiscipli essary to acquire this ion areas.	ne of Experimental I	Physics and
V (2) + F				many		
	. /	accment (tupe score land	guage — if other than German,	avamination offered if no	t overv comester informat	ion on whother
		le for bonus)	guage — If other than German,	examination onered — ii no	it every semester, mormat	ion on whether
d) proje e) prese If a writ stead ta of asses nation o	ect repo entatio ten exa ake the ssment date at	ort (approx. 8 to 10 pag n/talk (approx. 30 min amination was chosen e form of an oral exami	utes) as method of assessmo nation of one candidate rer must inform student	ent, this may be char e each or an oral exa	nged and assessme mination in groups.	If the method
Allocati	ion of p	olaces				
Additio	nal info	ormation				
 Worklo	ad					
120 h						
Teachin	ng cycl	8				
		LPO I (examination regulation	ons for teaching-degree progra	immes)		
§ 22 N § 22 N § 22 N	vr. 2 f)					
Module	appea	ars in				
First sta First sta	ate exa	mination for the teach mination for the teach	ng degree Grundschule ng degree Grundschule			
			ng degree Realschule F ng degree Gymnasium	Physics (2015)	s (Primary School) (2	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) 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.