

Module Catalogue for the Subject

Didactics in Chemistry (Primary School)

as Didaktikfach with the degree "Erste Staatsprüfung für das Lehramt an Grundschulen"

> Examination regulations version: 2009 Responsible: Faculty of Chemistry and Pharmacy

JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record L1|803|-|-|H|2009



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The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	10	5
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Freier Bereich (general as well as subject-specific electives)		13
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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:

LASPO2009

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

11-Jan-2012 (2011-102)

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

(10 ECTS credits)

Successful completion of modules worth no less than 10 ECTS credits in each subject selected as Didaktikfach (subject studied with a focus on teaching methodology) (mandatory courses) is a prerequisite for admission to the Erste Staatsprüfung (First State Examination) in the subject Didaktik der Grundschule (Didactics for Grundschule). In addition, modules worth another 5 ECTS credits must be successfully completed in one of the subjects selected as Didaktikfach (mandatory electives).

Module ordered by a probability to safely perform them. They have developed the ability to design the object of the module component on SWS (weekly contact hours) and course language available) Course: Substrate the time to their reacting on SWS (weekly contact hours) and course language available) Module component of SPD-ExUIN-1-op2: Experiments in the individual module component on SHS (weekly contact hours) and course specified beform a specified beform.
holder of the Professorship of Didactics of Chemistry Institute of Inorganic Chemistry ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites 1 semester undergraduate Contents This module equips students with experimental skills and teaches them how to incorporate experiments into their lessons. Intende learning outcomes Students have learned some essential experiments for the chemistry classroom in Grundschule and Hauptschule e schools and have developed the ability to safely perform them. They have developed the ability to design the own experiments, tailor them to their teaching goals and to incorporate them into their lessons. Courses (type, number of weekly contact hours, language – if other than German) This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-FD-ExUnt-1-092: Ü (no information on SWS (weekly contact hours) and course language available) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) Assessment in this module comprises the assessments in the individual module components as specified below. Unless st
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 4 ECTS, Method of grading: numerical grade presentation with demonstration (approx. 30 minutes) Language of assessment: German or English Assessment in module component o8-FD-ExUnt-2-092: Planning of Teaching Units 1 ECTS, Method of grading: numerical grade presentation (approx. 20 minutes) Language of assessment: German or English
Allocation of places
Additional information
Workload
Teaching cycle
Referred to in LPO I (examination regulations for teaching-degree programmes)
 § 36 (1) 7. Didaktik der Grundschule Chemie § 38 (1) 1. Didaktik der Hauptschule Chemie § 38 (1) 1. Didaktik der Mittelschule Chemie § 42 Chemie Fachdidaktik
LA Grundschulen Didactics in Chemistry (Primary JMU Würzburg • generated 26-Aug-2024 • exam. reg. data re- page 6 / 35 School) (2009) cord Lehramt Grundschulen (Didaktikfach) Chemie - 2009 page 6 / 35

Module appears in

First state examination for the teaching degree Grundschule Chemistry (2009)

First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Chemistry (2009)

First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013)

Module	title				Abbreviation	
Chemis	try Edu	cation: Educational The	ory and Models of Te	aching Concepts	08-FD-Ch-BM-Did-092-m01	
Module coordinator				Module offered by		
holder of the Professorship of Didactics of Chemistry			s of Chemistry	Institute of Inorgan	ic Chemistry	
ECTS				npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites	25		
1 seme	ster	undergraduate				
Conten	ts					
This mo	odule ir	ntroduces students to the	e fundamentals of ch	emistry didactics.		
Intende	ed learr	ning outcomes				
					r. They are able to select and pre- them in the chemistry classroom.	
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
• 0	8-FD-Ei				ourse language available) s) and course language availa-	
		essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
• 3 • w • La Assess • 2 • p • La Allocati	ment in ECTS, rritten e anguag ment in ECTS, resenta anguag ion of p	module component o8 - Method of grading: nume examination (approx. 90 ge of assessment: Germa module component o8 - Method of grading: (not) ation (approx. 20 minutes ge of assessment: Germa blaces	erical grade minutes) n or English FD-Ch-BM-Did-2-092 successfully complet s)	: Generation and Ut		
Additio	nal info	ormation				
Worklo	ad					
Teachir	ng cycl	9				
		LPO I (examination regulations		mmes)		
§ 38 (1) § 38 (1) § 42 Ch	1. Dida 1. Dida emie F	aktik der Grundschule Ch aktik der Hauptschule Ch aktik der Mittelschule Ch achdidaktik mie Didaktik	emie			

Module appears in

First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2013)



Compulsory Electives

(ECTS credits)

Module title					Abbreviation	
Concep	ots of To	eaching Chemistry			08-FD-SchulUms-Did-092-m01	
Module	e coord	inator		Module offered by		
holder of the Professorship of Didactics of Chemis			s of Chemistry	Chemistry Institute of Inorganic Chemistry		
ECTS Method of grading Only after succ. compl. of module(s)						
5 numerical grade						
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Topics	covere	d in the chemistry curricu	la for Hauptschule so	chools and ways to t	each them.	
Intende	ed lear	ning outcomes				
They ha	ave dev				nditions of chemistry lessons. nemistry classroom on the basis	
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
compoi • 0 • 0	nent. 8-FD-S	chulUms-1-092: S (no info chulUms-Did-2-092: S (1	ormation on SWS (we	ekly contact hours) a	sted separately for each module Ind course language available) hours) and course language	
		sessment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
	less st	ated otherwise, successf			e components as specified be- successful completion of all indi-	
• 3 • T • L • Assess • 2 • W	ECTS, estat (e anguag ment i ECTS, vritten e	n module component o8- Method of grading: nume exam, approx. 20 minutes ge of assessment: Germa n module component o8- Method of grading: nume examination (approx. 45 ge of assessment: Germa	erical grade s) n or English FD-SchulUms-Did-2- erical grade minutes)		and Practicabilities in Schools ics of School-Chemistry	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teachir	ıg cycl	e				
Referre	d to in	LPO I (examination regulations	s for teaching-degree progra	mmes)		
§ 38 (1) § 38 (1)	1. Did 1. Did	aktik der Grundschule Ch aktik der Hauptschule Ch aktik der Mittelschule Ch ʿachdidaktik	emie			

Module appears in

First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2013)



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

(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".



Subject-specific Extra Skills (ECTS credits)

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

LA Grundschulen Didactics in Chemistry (Primary School) (2009)

woanle	e title			Abbreviation
Physica	al Chemistry (teaching degre	e for secondary schools	5)	08-PC-GHR-102-m01
Module coordinator			Module offered by	
für Stud	r of lecture "Thermodynamik, dierende der Biologie, Leben ntes Chemie GHR"		Institute of Physica	l and Theoretical Chemistry
ECTS	Method of grading	Only after succ. con	. compl. of module(s)	
4	numerical grade		• • • •	
, Duratio		Other prerequisites		
1 seme				
Conten				
	odule discusses the fundame	ental principles of therm	odynamics, kinetics	and electrochemistry.
intende	ed learning outcomes			
	ts have become familiar with They are able to understand			nics, kinetics and electroche- re and engineering.
Course	S (type, number of weekly contact hou	ırs, language — if other than Ge	rman)	
	no information on SWS (week			able)
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	s creditable for bonus)	iguage — ii other than German,	examination onered — ii no	it every semester, mormation on whether
	examination (approx. 60 mi	nutes)		
whitten	chaimination (approx. 00 mil	nucs)		
Allocat	ion of places			
Allocat	ion of places			
	ion of places onal information			
 Additio 	nal information			
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 Additio Worklo 	nal information			
 Additio Worklo Teachii	onal information ad ng cycle	tions for teaching degree progra	mmec)	
 Additio Worklo Teachii Referre	ad ng cycle ed to in LPO I (examination regula			nd Analytische Chemie"
 Additio Worklo Teachin Referre § 42 (1)	anal information ad ng cycle ed to in LPO I (examination regula) 1. Chemie "Allgemeine und			nd Analytische Chemie"
 Additio Worklo Teachin Referre § 42 (1) Module	ad ad ed to in LPO I (examination regula) 1. Chemie "Allgemeine und e appears in	Anorganische Chemie" (und "Physikalische u	nd Analytische Chemie"
 Additio Worklo Teachin Referre § 42 (1) Module First sta	ad ad ad construction cons	Anorganische Chemie" (ning degree Grundschule	und "Physikalische u e Chemistry (2009)	
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 Additio Worklo Teachin Referre § 42 (1) Module First sta First sta First sta First sta First sta First sta First sta First sta First sta First sta	ad ad ad ad ad ad ad ad ad ad	Anorganische Chemie" u ning degree Grundschule ning degree Grundschule ning degree Hauptschule ning degree Hauptschule ning degree Realschule (ning degree Sonderpäda	und "Physikalische u e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) gogik Didactics in Cl gogik Didactics in Cl	stry (Primary School) (2009) stry (Secondary School) (2009) nemistry (Secondary School)
 Additio Worklo Teachin Referre § 42 (1) Module First sta First sta	ad ad ad ad ad ad ad ad ad ad	Anorganische Chemie" u ning degree Grundschule ning degree Grundschule ning degree Hauptschule ning degree Hauptschule ning degree Realschule (ning degree Sonderpäda ning degree Sonderpäda	und "Physikalische u e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) gogik Didactics in Cl gogik Didactics in Cl e Chemistry (2013)	stry (Primary School) (2009) stry (Secondary School) (2009) nemistry (Secondary School) nemistry (Middle School) (2013

	e title				Abbreviation
Inorgar	nic Che	mistry of the Elements	(teaching degree for s	secondary schools)	08-AC2-LAGY-102-m01
Module	e coord	inator		Module offered by	<u>.</u>
lecture mistry)		ure "Festkörperchemie	" (Solid State Che-	Institute of Inorgan	ic Chemistry
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
3	nume	rical grade			
Duratio		Module level	Other prerequisites	5	
1 seme	ster	undergraduate			
Conten					
		quins students with an		of metals allovs and	d saline compounds. It focuses
		ures and properties, sp			
		ning outcomes		•	
	-	-	Icture and properties of	of metals, allovs and	saline compounds in an appro
		. They are able to system			
Course	S (type, r	umber of weekly contact hours	, language — if other than Ge	rman)	
		ion on SWS (weekly co			<u>a)</u>
					ot every semester, information on whethe
		le for bonus)			
or 90 m each (a	ninutes approx.		ations: approx. 60 min examination in groups	nutes each) or b) ora	tten examinations: approx. 60 l examination of one candidate . 30 minutes)
Allocat					
Additio					
	onal inf	ormation			
	onal inf	ormation			
		ormation			
 Worklo		ormation			
 Worklo 	ad				
 Worklo 	ad				
 Worklo Teachin 	oad ng cycl	e			
 Worklo Teachin Referre	ad ng cycl ed to in	e LPOI (examination regulatio			Apolytischo Chomio"
 Worklo Teachin Referre § 62 (1)	ng cycl ed to in) 1. Che	e LPO I (examination regulation mie "Allgemeine und Au			Analytische Chemie"
 Worklo Teachin Referre § 62 (1) Module	ad ng cycl ed to in) 1. Che e appea	e LPO I (examination regulatio mie "Allgemeine und An Irs in	norganische Chemie";	"Physikalische und	Analytische Chemie"
 Worklo Teachin Referre § 62 (1) Module First sta	ng cycl ed to in) 1. Che e appea ate exa	e LPOI (examination regulation mie "Allgemeine und An I rs in mination for the teachir	norganische Chemie"; ng degree Grundschule	"Physikalische und e Chemistry (2009)	
 Worklo Teachin § 62 (1) Module First sta First sta	ed to in) 1. Che e appea ate exa ate exa	e LPO I (examination regulation mie "Allgemeine und Au Irs in mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule	"Physikalische und e Chemistry (2009) e Didactics in Chemis	Analytische Chemie" stry (Primary School) (2009)
 Worklo Teachin <u>Referre</u> § 62 (1) Module First sta First sta First sta	ed to in) 1. Che e appea ate exa ate exa ate exa ate exa	e LPO I (examination regulation mie "Allgemeine und Autor Ins in mination for the teachir mination for the teachir mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule	"Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009)	stry (Primary School) (2009)
 Worklo Teachin Referre § 62 (1) Module First sta First sta First sta First sta	ad ng cycl ed to in) 1. Che e appea ate exa ate exa ate exa ate exa ate exa	e LPO I (examination regulation mie "Allgemeine und Autor Ins in mination for the teachir mination for the teachir mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule ng degree Hauptschule	"Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis	
 Worklo Teachin Referre § 62 (1) Module First sta First sta First sta First sta First sta First sta	ed to in) 1. Che e appea ate exa ate exa ate exa ate exa ate exa ate exa	e LPOI (examination regulation mie "Allgemeine und An Ins in mination for the teachir mination for the teachir mination for the teachir mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule ng degree Hauptschule ng degree Realschule ("Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009)	stry (Primary School) (2009)
 Worklo Teachin Referre § 62 (1) Module First sta First sta First sta First sta First sta First sta First sta	ed to in) 1. Che e appea ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	e LPO I (examination regulation mie "Allgemeine und An irs in mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule ng degree Hauptschule ng degree Realschule (ng degree Gymnasium	"Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009)	stry (Primary School) (2009)
 Worklo Teachin Referre § 62 (1) Module First sta First sta First sta First sta First sta First sta First sta First sta (2009)	ad ng cycl ed to in) 1. Che e appea ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	e LPOI (examination regulation mie "Allgemeine und An mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule ng degree Hauptschule ng degree Realschule (ng degree Gymnasium ng degree Sonderpäda	"Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009) agogik Didactics in Cl	stry (Primary School) (2009) stry (Secondary School) (2009) hemistry (Secondary School)
 Worklo Teachin Referre § 62 (1) Module First sta First sta	ad ng cycl ed to in) 1. Che e appea ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	e LPOI (examination regulation mie "Allgemeine und An mination for the teachir mination for the teachir	norganische Chemie"; ng degree Grundschule ng degree Grundschule ng degree Hauptschule ng degree Hauptschule ng degree Realschule (ng degree Gymnasium ng degree Sonderpäda	"Physikalische und e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009) agogik Didactics in Cl	stry (Primary School) (2009) stry (Secondary School) (2009)

	e title				Abbreviation	
Organic Chemistry - laboratory course (teaching degree for secondary schools) 08-0C-Prakt-GHR-092-model					o8-OC-Prakt-GHR-o	92-m01
Module coordinator				Module offered by		
lecturers Organische Chemie (Organic Chemistry)			Chemistry)	Institute of Organic	: Chemistry	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	(not) s	successfully completed		· · ·		
Duratio	n	Module level	Other prerequisites	ites		
1 seme	ster	undergraduate				
Conten	ts					
lated le dition t their kr	ecture(s o those nowledg	ives students the opport b). After a safety briefing, e experiments, students ge. The course focuses o organic chemistry, simpl	the students autono will be expected to ta n the safe handling o	mously conduct exp ke oral tests and wr f hazardous substar	eriments in the labor ite lab reports to den nces, simple experim	ratory. In ad- nonstrate
Intende	ed leari	ning outcomes				
rations	of orga ources.	v how to safely handle hand They are able to connectory.	able to analyse the yi	eld and purity of the	products and identi	fy possible
Course	S (type, n	umber of weekly contact hours, I	anguage — if other than Ger	rman)		
P (no ir	format	ion on SWS (weekly cont	act hours) and cours	e language availabl	e)	
		sessment (type, scope, langua	ge — if other than German,	examination offered — if n	ot every semester, informati	on on whether
	st-expe	le for bonus) riment examination talks ffered: once a year, sumi		approx. 15 minutes e		
pre/po Assess	st-expe ment o	riment examination talks	ner semester	approx. 15 minutes e		
pre/po Assess	st-expe ment o ge of a	riment examination talks ffered: once a year, sum ssessment: German or E	ner semester	approx. 15 minutes e		
pre/po Assess Langua	st-expe ment o ge of a	riment examination talks ffered: once a year, sum ssessment: German or E	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat	st-expe ment o ge of a ion of p	riment examination talks ffered: once a year, sum ssessment: German or E	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat	st-expe ment o ge of a ion of p	riment examination talks ffered: once a year, sumi ssessment: German or E blaces	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat 	st-expe ment o ge of a ion of p nal inf	riment examination talks ffered: once a year, sumi ssessment: German or E blaces	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat Additio Worklo	st-expe ment o ge of a ion of p nal info ad	riment examination talks ffered: once a year, sum ssessment: German or E blaces ormation	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat Additio	st-expe ment o ge of a ion of p nal info ad	riment examination talks ffered: once a year, sum ssessment: German or E blaces ormation	ner semester	approx. 15 minutes e		
pre/po Assess Langua Allocat Additio Worklo Teachin 	st-expe ment o ge of a ion of p nal info ad	riment examination talks ffered: once a year, sum ssessment: German or E blaces ormation	mer semester nglish			
pre/po Assess Langua Allocat Additio Worklo Teachin 	st-expe ment o ge of a ion of p nal info ad	riment examination talks ffered: once a year, sum ssessment: German or E blaces ormation	mer semester nglish			
pre/po Assess Langua Allocat Morklo Teachin Referre	st-expe ment o ge of a ion of p nal info ad ng cyclo	riment examination talks ffered: once a year, sum ssessment: German or E blaces ormation	mer semester nglish s for teaching-degree progra	ummes)		
pre/po Assess Langua Allocat Additio Worklo Teachin 8 42 (1) Module	st-expe ment o ge of a ion of p nal info ad ng cyclo ed to in 2. Che e appea	eriment examination talks ffered: once a year, sum ssessment: German or Er blaces ormation e E LPO I (examination regulation omie "Organische und Bio	mer semester nglish s for teaching-degree progra oorganische Chemie"	ummes)		
pre/po Assess Langua Allocat Additio Worklo Teachin § 42 (1) Module First sta First sta First sta First sta	st-expe ment o ge of a ion of p mal info ad ad ed to in 2. Che e appea ate exa ate exa ate exa ate exa	e Examination talks ffered: once a year, summinisessessment: German or Emplaces ormation E E E E E E E E E E E E E	mer semester nglish s for teaching-degree progra oorganische Chemie" g degree Grundschule g degree Hauptschule g degree Hauptschule	e Chemistry (2009) Didactics in Chemi Didactics in Chemi	each), log (approx. 5 stry (Primary School)	to 10 pages)
pre/po Assess Langua Allocat Additio Worklo Teachin Referre § 42 (1) Module First sta First sta First sta First sta First sta First sta (2009)	st-expe ment o ge of a ion of p mal info ad ad ad ad ad ad ad ad ad ad ate exa ate exa	e EVALUATE INTERPORT OF THE TRANSPORT OF	mer semester nglish s for teaching-degree progra porganische Chemie" g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule G g degree Sonderpäda	e Chemistry (2009) e Didactics in Chemi chemistry (2009) e Didactics in Chemi Chemistry (2009) gogik Didactics in C	each), log (approx. 5 t stry (Primary School) stry (Secondary Schoo hemistry (Secondary	to 10 pages) to 10 pages) (2009) (2009) ool) (2009) School)
pre/po Assess Langua Allocat Moditio Worklo Teachin Referre § 42 (1) Module First sta First sta	st-expe ment o ge of a ion of p mal info ad ad ad ad ad ad ad ad ad ad ad ate exa ate exa	e Experiment examination talks ffered: once a year, sumministion telesion places ormation e E E E E E E E E E E E E E	mer semester nglish s for teaching-degree progra porganische Chemie" g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule G g degree Sonderpäda g degree Sonderpäda g degree Mittelschule	e Chemistry (2009) e Didactics in Chemi e Chemistry (2009) e Didactics in Chemi chemistry (2009) gogik Didactics in C gogik Didactics in C	each), log (approx. 5 t stry (Primary School) stry (Secondary Schoo hemistry (Secondary hemistry (Middle Sch	to 10 pages) to 10 pages) (2009) (2009) ool) (2009) School)



Module	e title				Abbreviation
Basic N	Nathen	natics (teaching degree)			08-PC-VKM-LA-102-m01
Module coordinator				Module offered by	
lecture	r of blo	ock course "Mathematik"	(Mathematics)	Institute of Physica	and Theoretical Chemistry
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
2	(not)	successfully completed		-	
Duratio		Module level	Other prerequisites	i	
1 seme		undergraduate			
Conten			1		
					sed in physical/theoretical che thermodynamics and kinetics.
		ning outcomes		examples taken non	
Studen mistry.	is nav	e been trained in mathem	iatical methods. They	y are able to apply th	ose methods to problems in ch
	C (turno	number of weekly contact hours,	anguago if ather that Car	rman)	
	-				
		rmation on SWS (weekly			
			ige — if other than German,	examination offered — if no	t every semester, information on whether
		ole for bonus)			
		vork sheets) Issessment: German or E	nglich		
	-				
Allocat		places			
Additio	onal inf	ormation			
Worklo	ad				
Teachi	ng cycl	e			
Teachi	ng cycl	e			
			s for teaching-degree progra	ammes)	
		e LPOI (examination regulation	s for teaching-degree progra	ammes)	
 Referre 	ed to in	LPOI (examination regulation	s for teaching-degree progra	ammes)	
 Referre Module	ed to in e appea	LPO I (examination regulation			
 Referre Module First sta	ed to in e appea ate exa	LPOI (examination regulation ars in mination for the teaching	g degree Grundschule	e Chemistry (2009)	itry (Primary School) (2000)
 Referre Module First sta First sta	ed to in e appea ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule	e Chemistry (2009) e Didactics in Chemis	try (Primary School) (2009)
 Referre Module First sta First sta First sta	ed to in e appea ate exa ate exa ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009)	
 Referre First sta First sta First sta First sta	ed to in e appea ate exa ate exa ate exa ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching mination for the teaching mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis	stry (Primary School) (2009) stry (Secondary School) (2009)
 Referre First sta First sta First sta First sta First sta	ed to in e appea ate exa ate exa ate exa ate exa ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule (e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009)	
 Referre First sta First sta First sta First sta First sta First sta	ed to in e appea ate exa ate exa ate exa ate exa ate exa ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule (g degree Gymnasium	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009)	try (Secondary School) (2009)
 Referre First sta First sta First sta First sta First sta First sta First sta	ed to in e appea ate exa ate exa ate exa ate exa ate exa ate exa	LPOI (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule (g degree Gymnasium	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009)	, , , , , ,
 Referre First sta First sta First sta First sta First sta First sta First sta (2009)	ed to in e appea ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	LPO I (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule (g degree Gymnasium g degree Sonderpäda	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009) gogik Didactics in Ch	etry (Secondary School) (2009) nemistry (Secondary School)
First sta First sta First sta First sta First sta First sta First sta (2009) First sta	ed to in e appea ate exa ate exa ate exa ate exa ate exa ate exa ate exa ate exa	LPO I (examination regulation ars in mination for the teaching mination for the teaching	g degree Grundschule g degree Grundschule g degree Hauptschule g degree Hauptschule g degree Realschule (g degree Gymnasium g degree Sonderpäda g degree Sonderpäda	e Chemistry (2009) e Didactics in Chemis e Chemistry (2009) e Didactics in Chemis Chemistry (2009) Chemistry (2009) gogik Didactics in Ch	try (Secondary School) (2009)

Module title					Abbreviation		
Exercis	es in E	xperimental Presentat	ion		08-Ch-GH-ÜiV-092-	m01	
Module	e coord	inator		Module offered by			
lecture	rs of th	e three lectures offered	l in this module	Faculty of Chemistry and Pharmacy			
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
6	(not) s	successfully completed					
Duratio	Duration Module level Other prerequisites						
1 seme	ster	undergraduate					
Conten	ts						
		design, prepare and de ionstrations.	liver presentations on	a range of topics in o	chemistry. Presentat	ions will in-	
Intende	ed lear	ning outcomes					
the spe particu	ecific ne lar tead	eeds of their audience.	d and scientifically cor They are able to select plan and safely perfor their teaching skills.	experiments on the	topic in question the	at support a	
Course	S (type, r	number of weekly contact hour	s, language — if other than Ger	man)			
compo • c • c	nent. 98-Ch-L 98-Ch-L 98-Ch-G	A-ÜiV-1-092: Ü (no info A-ÜiV-2-092: Ü (no info H-ÜiV-3-092: Ü (no info	nponents. Information rmation on SWS (week ormation on SWS (week ormation on SWS (week guage — if other than German, o	ly contact hours) and ly contact hours) and (ly contact hours) an	d course language av d course language a id course language a	vailable) vailable) available)	
low. Ur vidual a Assess mistry) 2 tti Assess mistry) 2 tti Assess mistry) 2 2 tti Assess mistry) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 2 ECTS, Method of grading: (not) successfully completed talk with demonstrations (approx. 45 minutes) Assessment offered: once a year, winter semester Language of assessment: German or English Assessment in module component o8-Ch-LA-ÜiV-2-092: Exercises in Experimental Presentation (Organic Che-						
		ge of assessment: Gern	nan or English				
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
LA Grundso School) (20		actics in Chemistry (Primary		nerated 26-Aug-2024 • exan Indschulen (Didaktikfach) Ch	-	page 20 / 35	

Workload

Teaching cycle

Referred to in LPO I (examination regulations for teaching-degree programmes)

§ 42 (1) 3. Chemie "Übungen im Vortragen mit Demonstrationen"

Module appears in

First state examination for the teaching degree Grundschule Chemistry (2009)

First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Chemistry (2009)

First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013)

Modul	e title				Abbreviation
Organi	ic Chem	istry 1 (teaching degree	for secondary schoo	ls)	08-0C1-GHR-092-m01
Module	e coord	inator		Module offered by	
holder of the Professorship of Organic Chemistry			Chemistry	Institute of Organic	Chemistry
ECTS				pl. of module(s)	
6	1	rical grade			
Duratio		Module level	Other prerequisites		
1 seme		undergraduate			successful completion of exerci-
1 Seine		undergraduate	ses in the respective (usually 70% of exe	e classes as specifie rcises to be success	d at the beginning of the course fully completed) as well as regu- aximum of 2 incidents of unexcu-
Conten	nts				
the boi organio	nding s c comp	ituation of carbon and ir	troduces students to discusses the fundan	the nomenclature of nental principles of s	of organic chemistry. It examines f simple and moderately complex stereochemistry, substitution, ad-
Intend	ed lear	ning outcomes			
of nom lecules	enclatu 5. They a urpose,	are to determine simple are able to describe and	substance names. Stu formulate some of th	idents are able to an e most important rea	re able to use different systems alyse the stereochemistry of mo- actions in organic chemistry. For ions and can use them for simple
Course	S (type, r	number of weekly contact hours,	language — if other than Ge	rman)	
V + Ü (I	no infoi	mation on SWS (weekly	contact hours) and co	ourse language avail	able)
		sessment (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	t every semester, information on whether
or 90 n each (a	ninutes approx.		itions: approx. 60 mir kamination in groups	nutes each) or b) ora	ten examinations: approx. 60 l examination of one candidate . 30 minutes)
	tion of p				
Additic	nal inf	ormation			
Worklo	ad				
WORKIC	au				
		_			
reachi	ng cycl	e			
		LPO I (examination regulation			
§ 42 (1)) 2. Che	mie "Organische und Bi	oorganische Chemie"		
Module appears in					
First st		• • • • • • •		Didactics in Chamie	
First st First st	ate exa				stry (Primary School) (2009)
First st First st First st	ate exa ate exa	mination for the teachin	g degree Hauptschule	e Chemistry (2009)	
First st First st First st First st	ate exa ate exa ate exa	mination for the teachin	g degree Hauptschule g degree Hauptschule	e Chemistry (2009) e Didactics in Chemis	stry (Primary School) (2009) stry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013) First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2013)

Modul	e title				Abbreviation
Organi	c Chem	istry 2 (teaching degree	for secondary schoo	ls)	08-0C2-GHR-092-m01
Module coordinator				Module offered by	
holder of the Chair of Physically Organic Chemistry			c Chemistry	Institute of Organic	Chemistry
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
7	nume	rical grade			
Duratio		Module level	Other prerequisites		
1 seme	semester undergraduate Admission prerequisites as specified at the beginning of the (usually 70% of exercises to be successfully completed) as well lar attendance of exercises (usually a maximum of 2 incidents o sed absence).		d at the beginning of the course fully completed) as well as regu-		
Conten	Its				
the exa on read well as	ample o ctions t rearrai	of carbonyl compounds, i	t extends the student	s' knowledge of sub	ific reactions of aromatics. Using stitution, elimination and additi- ation and reduction reactions as
	-		a aultania fan anna di		e the varying reactivity of car-
bonyl o they ca	compou	inds. They are able to des and formulate multi-stag	scribe specific reaction	ons of carbonyls and	aromatics. For that purpose, anisms and can transfer them to
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V + Ü (I	no info	rmation on SWS (weekly	contact hours) and co	ourse language avail	able)
		sessment (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	t every semester, information on whether
or 90 n each (a	ninutes approx.		tions: approx. 60 mir amination in groups	utes each) or b) ora	tten examinations: approx. 60 l examination of one candidate . 30 minutes)
Allocat	-				
Additio	onal inf	ormation			
Worklo	ad				
Teachi	ng cvcl	e			
	0.950				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	
		emie "Organische und Bio			
	e appea				
		mination for the teaching	degree Grundschule	Chemistry (2000)	
					stry (Primary School) (2009)
		mination for the teaching			
		mination for the teachinន mination for the teachinន			stry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013) First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2013)

Module	e title				Abbreviation		
Bioche	mistry	(teaching degree for se	econdary schools)		08-BC-GHR-092-mc)1	
Module coordinator				Module offered by			
holder of the Chair of Biochemistry			Chair of Biochemis	trv			
ECTS Method of grading Only after succ. con				-)			
	1	rical grade					
4 Duratio		Module level	Other prerequisites				
		+ • •	· ·				
1 semester undergraduate		undergraduate	Admission prerequisite to assessment: successful completion of exerci- ses in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regu- lar attendance of exercises (usually a maximum of 2 incidents of unexcu- sed absence).				
Conten	ts						
Compri mistry.	-	ctures and exercises, th	nis module acquaints s	tudents with the fun	damental principles	of bioche-	
Intende	ed learı	ning outcomes					
Studen	its have	e become familiar with t cal processes in cellula		ples of biochemistry	. They are able to de	scribe the	
Course	S (type, n	umber of weekly contact hours	s, language — if other than Gei	rman)			
V + Ü (r	no infor	mation on SWS (weekl	y contact hours) and co	ourse language avail	able)		
		essment (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	ot every semester, informat	ion on whether	
minute	s) or c) ige of a	written examinations: e oral examination in gro ssessment: German or	oups (groups of 2, appr		one candidate each	(approx. 20	
			-				
Additio	onal info	ormation					
 Worklo	ad						
Teachir	ng cycl	e					
Referre	ed to in	LPOI (examination regulation	ons for teaching-degree progra	mmes)			
§ 42 (1)) 2. Che	mie "Organische und B	Bioorganische Chemie"				
Module	e appea	in					
		mination for the teachi	ng degree Grundschule	e Chemistry (2009)			
First sta	ate exa	mination for the teachin mination for the teachin	ng degree Grundschule	Didactics in Chemis	stry (Primary School)	(2009)	
First sta	ate exa	mination for the teachi	ng degree Hauptschule	Didactics in Chemis	stry (Secondary Scho	ool) (2009)	
First sta		mination for the teaching mination for the teaching mination for the teaching the teaching mination for teaching mination for the teaching mination for teachi			nemistry (Secondary	School)	
First sta	(2009) First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013)						
LA Grundsc	hulen Did	actics in Chemistry (Primary	JMU Würzburg ● ge	enerated 26-Aug-2024 • exan	n. reg. data re-	page 26 / 35	
School) (20	009)		cord Lehramt Gru	undschulen (Didaktikfach) Ch	iemie - 2009		



Module	e title				Abbreviation	
Guidan	ice in S	elf-reliant Scientific Wor	k		08-FD-WPF-WA-092-m01	
Module coordinator				Module offered by		
holder of the Professorship of Didactics of Chemistry			s of Chemistry	Institute of Inorgan	ic Chemistry	
ECTS	Method of grading Only after succ. compl. of module(s)					
2						
Duration Module level		Other prerequisites				
1 semester undergraduate						
Conten						
		vill teach students how to	o independently resea	arch and write on sel	ected topics in chemistry didac	
Intende	ed lear	ning outcomes				
			earch and write on s	elected topics in che	mistry didactics. They are able t	
		count of the current state				
		number of weekly contact hours, l		•	•	
		tion on SWS (weekly cont			i)	
-				<u> </u>	t every semester, information on whether	
		le for bonus)			every semester, monitation on whether	
presen	tation	(approx. 30 minutes)				
		ssessment: German or E	nglish			
Allocat	ion of	places				
Additio	nal inf	ormation				
Worklo	ad					
Teachi	ng cycl	Δ				
	<u>15 cyci</u>					
Doforro	d to in					
Referre		LPO I (examination regulation	s for teaching-degree progra	immes)		
		•				
Module						
		mination for the teaching	-		try (Drimany School) (2000)	
First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009)						
First state examination for the teaching degree Hauptschule Chemistry (2009)						
First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Realschule Chemistry (2009)						
First state examination for the teaching degree Realschule Chemistry (2009) First state examination for the teaching degree Gymnasium Chemistry (2009)						
		-			nemistry (Secondary School)	
(2009)					, , , ,	
	ate exa	-	g degree Sonderpäda	gogik Didactics in Cl	nemistry (Middle School) (2013)	
	First state examination for the teaching degree Mittelschule Chemistry (2013)					
First sta				• -	try (Middle School) (2013)	

Module title Abbreviation						
Preparation of Exams (Primary and Secondary Public Scholl Teachers) 08-FD-WPF-PVGSHS-092-m					08-FD-WPF-PVGSHS-092-m01	
Modul	e coord	inator		Module offered by	1	
holder of the Professorship of Didactics of Chemistry			s of Chemistry	Institute of Inorganic Chemistry		
ECTS				pl. of module(s)		
2	nume	rical grade				
Duration Module level Other prerequisite			Other prerequisites			
1 semester undergraduate						
Conter	nts					
Studer	nts will	solve selected questions	that were asked in th	ne state examinatio	n in previous years.	
		ning outcomes				
	-		estions that were ask	ed in the state exa	mination in previous years.	
		number of weekly contact hours, l			, , ,	
	_	ion on SWS (weekly cont			le)	
written examination (approx. 30 minutes) Allocation of places						
Additio	onal inf	ormation				
 Worklo	ad		· · · · · · · · · · · · · · · · · · ·			
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		
 Module appears in						
First state examination for the teaching degree Grundschule Chemistry (2009)						
First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009)						
First state examination for the teaching degree Hauptschule Chemistry (2009) First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009)						
(2009)		mination for the teaching	s degree Sonderpada	gogik Didactics In (Chemistry (Secondary School)	
		mination for the teaching	g degree Sonderpäda	gogik Didactics in (Chemistry (Middle School) (2013)	
First state examination for the teaching degree Mittelschule Chemistry (2013)						
First st	First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2013)					

Module title					Abbreviation			
Extracurricular Sites 08-FD-WPF-LLL-092-m01								
Module coordinator				Module offered by				
holder of the Professorship of Didactics			s of Chemistry	of Chemistry Institute of Inorganic Chemistry				
ECTS	Meth	od of grading	ing Only after succ. compl. of module(s)					
4	(not)	successfully completed						
Duration Module level Other prerequisites								
1 seme	ster	undergraduate						
Conten	Contents							
This m	This module discusses the opportunities and limitations of out-of-classroom learning in chemistry.							
Intend	ed lear	ning outcomes						
activiti	es in so		eir teaching goals. T		ing activities and, in particular, nose plans into practice and gui-			
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Gei	rman)				
compo • c	 This module comprises 2 module components. Information on courses will be listed separately for each module component. o8-FD-WPF-LLL-1-092: S (no information on SWS (weekly contact hours) and course language available) 							
		Sessment (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	t every semester, information on whether			
 Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments. Assessment in module component o8-FD-WPF-LLL-1-o92: Opportunities of Extracurricular Sites 2 ECTS, Method of grading: (not) successfully completed presentation of a project (approx. 30 minutes) Language of assessment: German or English Assessment in module component o8-FD-WPF-LLL-2-o92: School Lab 2 ECTS, Method of grading: (not) successfully completed a successful supervision of experiments in learn-teach-lab Language of assessment: German or English 								
Allocat	ion of p	places						
 Additional information 								
Worklo	ad							
Teaching cycle								
Referred to in LPO I (examination regulations for teaching-degree programmes)								
Module	Module appears in							
First state examination for the teaching degree Grundschule Chemistry (2009) First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Chemistry (2009)								
LA Grundso School) (20		lactics in Chemistry (Primary		enerated 26-Aug-2024 • exam undschulen (Didaktikfach) Ch				

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First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Realschule Chemistry (2009)

First state examination for the teaching degree Gymnasium Chemistry (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013)

Inorganic Che			Abbreviation				
Inorganic Chemistry 1 (teaching degree)				08-AC1-LA-102-m01			
Module coordinator			Module offered by				
lecturer of lecture "Experimentalchemie" (Experimental Chemistry)							
20 nume							
Duration	Module level	Other prerequisites	Other prerequisites				
1 semesterundergraduateBy way of exception, additional prerequisites are listed in assessments.				isites are listed in th	e section on		
Contents							
module introc exercises bas autonomously ques, the syn	cid-base reactions, the p luces fundamental mod ed on the lecture on exp y conduct experiments i thesis of simple substar o advance their laborato	els of chemistry and p perimental chemistry a n the laboratory. The c nces and analyses of u	rinciples of inorgani and its extension. Aft course focuses on lal	c chemistry. It includ er a safety briefing, t poratory safety, simp	les practical he students le lab techni		
Intended lear	ning outcomes						
le to explain basic models of the structure of matter. They have developed the ability to use the language of che- mical formulas to describe chemical reactions and to interpret them by identifying the type of reaction. Students are able to describe the main quantitative and qualitative analytical methods and their application areas. They are able to identify fundamental problems in chemistry and perform experiments to solve them. They have deve- loped the ability to perform the necessary stoichiometric calculations and describe the chemical processes in an appropriate manner, both in written and oral form.							
Courses (type, number of weekly contact hours, language — if other than German)							
 This module comprises 3 module components. Information on courses will be listed separately for each module component. o8-AC1-1102: V + V + Ü (no information on SWS (weekly contact hours) and course language available) o8-AC1-LA-2-102: P (no information on SWS (weekly contact hours) and course language available) o8-AC1-LA-3-102: V (no information on SWS (weekly contact hours) and course language available) 							
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)							
module is creditat	ole for bonus)	uage — if other than German,	examination offered — if no		able) able)		
Assessment i	n this module comprises ated otherwise, success	s the assessments in t	he individual modul	e components as sp	able) able) ion on whether ecified be-		
Assessment in low. Unless st vidual assess Assessment i mistry Princip 10 ECTS a) 1 to 3 90 minu (approx Languag Other p respect complei absence Assessment i	n this module comprises ated otherwise, success ments. n module component of les of Inorganic Chemis , Method of grading: nu written examinations (utes each; 3 written exar . 20 minutes) or c) oral ge of assessment: Germ rerequisites: Admissior ive classes as specified ted) as well as regular a	s the assessments in t sful completion of the 3-AC1-1-102: Principles try merical grade written examination: ninations: 60 minutes examination in groups an or English prerequisite to asses at the beginning of the ttendance of exercise 3-AC1-LA-2-102: Inorga	the individual modul module will require s of Inorganic Chemis each) or b) oral exan s (groups of 2, approx ssment: successful of course (usually 70% s (usually a maximu	e components as spo successful completion stry Principles of Inor s 2 written examination ination of one candio (30 minutes) completion of exercion of exercises to be su m of 2 incidents of u	able) able) ion on whether ecified be- on of all indi- rganic Che- ons: 60 or idate each ses in the accessfully inexcused		

- pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes each), log (approx. 5 to 10 pages)
- Assessment offered: once a year, summer semester
- Language of assessment: German or English

Assessment in module component o8-AC1-LA-3-102: Inorganic Chemistry 1 (accompanying lecture) (teaching degree)

- 3 ECTS, Method of grading: numerical grade
- a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: 60 or 90 minutes each; 3 written examinations: 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)
- Language of assessment: German or English

Allocation of places

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Additional information

Workload

Teaching cycle

Referred to in LPO I (examination regulations for teaching-degree programmes)

§ 42 (1) 1. Chemie "Allgemeine und Anorganische Chemie" und "Physikalische und Analytische Chemie"

§ 62 (1) 1. Chemie "Allgemeine und Anorganische Chemie"; "Physikalische und Analytische Chemie"

Module appears in

First state examination for the teaching degree Grundschule Chemistry (2009)

First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009) First state examination for the teaching degree Hauptschule Chemistry (2009)

First state examination for the teaching degree Hauptschule Didactics in Chemistry (Secondary School) (2009) First state examination for the teaching degree Realschule Chemistry (2009)

First state examination for the teaching degree Gymnasium Chemistry (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Secondary School) (2009)

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2013) First state examination for the teaching degree Mittelschule Chemistry (2013)



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 Grundschule may write this thesis in the subject Didaktik der Grundschule (Didactics of Grundschule), 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.

Module title Abbreviation						
Admission work (Chemistry for Primary School Teachers) 08-Ch-HA-DF-GS-092-m01					08-Ch-HA-DF-GS-092-m01	
Module coordinator				Module offered by		
head of the research group offering the		module	Faculty of Chemistr	y and Pharmacy		
ECTS	Method of grading Only after succ. compl. of module(s)					
10	numerical grade Where applicable, specific modules/module components as speci supervisor.			dule components as specified by		
Duration Module level		Other prerequisites				
1 semes	ter	undergraduate				
Content	s					
in chem provisio	istry o ns of S	r chemistry didactics the Section 29 LPO (examina	y have agreed upon v	vith an authorised ex	ly research and write on a topic xaminer in accordance with the rammes).	
Intende	d learr	ning outcomes				
and analyse a problem, conduct a literature search, refer to relevant theories, interpret data, draw logical conclu- sions, and offer approaches to the solution of said problem) be able to work to deadlines be able to prepare an appropriate written account of the results of their work. Courses (type, number of weekly contact hours, language — if other than German)						
no cours	ses as	signed				
		essment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
Languag	ge of a	(Zulassungsarbeit, appro ssessment: German, exc ee programmes)		e with Section 29 LP	O I (examination regulations for	
Allocatio		• •				
	•					
Additior	nal info	ormation				
Workload						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2009)						