

Module Catalogue for the Subject

Food Chemistry

as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Examination regulations version: 2012 Responsible: Faculty of Chemistry and Pharmacy

JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 88|096|-|-|H|2012

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The subject is divided into

section / sub-section	ECTS credits	starting page
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Thesis	30	36



Content and Objectives of the Programme

No translation available.

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:

ASP02009

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

28-Aug-2012 (2012-153)

25-Oct-2017 (2017-64)

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.

Master's with 1 major Food Chemistry (2012)



Compulsory Courses

(75 ECTS credits)

Module title			Abbreviation		
Nutritional Biochemistry			o8-LMC-BCdE1-122-mo1		
Module coordinator		Module offered by			
holder	of the C	Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
7	numei	rical grade			
Duratio	n	Module level	Other prerequisites		
2 seme	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 2. Letter e of A	Section 2 Subsectior Idung und Prüfung c n und Lebensmittelc on of state-certified f nnex 1 of APOLmCh.	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- food chemists) in connection with
Conten	ts				
Quantit tabolisa al diets of the b metabo	ative a able en ; functi biosyntl blic regu	nd qualitative aspects of ergy of the three main nu ions of the main organs; hesis and metabolism of ulation and hormonal reg	nutrition, e.g. energy utrients, biological va fundamental principl food constituents; in gulation; mineral meta	/ balance, basal met lue; fundamental pr es of digestion, abso teractions in intermo abolism; nutrition ar	abolic rate, the gross and me- inciples of dietetics and speci- orption and excretion as well as ediary metabolism; principles of nd vitamins.
Intende	ed learr	ning outcomes			
Studen develor nisms c	ts knov oed an of meta	v how the relevant micro understanding of the bio bolic pathways.	and macronutrients a chemical processing	are transported throu of nutrients in the c	ugh the human body. They have ells and of the regulatory mecha-
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V + V (n	io infor	mation on SWS (weekly o	contact hours) and co	urse language avail	able)
Methoo module is	l of ass creditab	e ssment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
a) 1 to 3 aminati nation (nutes) Langua	3 writte ions: aj of one o ge of a	n examinations (1 writter pprox. 60 or 90 minutes candidate each (approx. ssessment: German or Er	n examination: appro each; 3 written exami 20 minutes) or c) ora nglish	x. 90 minutes or app nations: approx. 60 l examination in gro	orox. 120 minutes; 2 written ex- minutes each) or b) oral exami- ups (groups of 2, approx. 30 mi-
Allocat	ion of p	olaces			
Additio	nal info	ormation	·····		
Workload					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	appea	irs in	tra ()		
Master's degree (1 major) Food Chemistry (2012)					

Module title			Abbreviation		
Laboratory Courses in Nutritional Biochemistry				08-LMC-BCdE2-122-m01	
Module coordinator				Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
7	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
2 seme	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 1. Letter c of A	Section 2 Subsectior Idung und Prüfung d n und Lebensmittelc on of state-certified f nnex 1 of APOLmCh.	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with
Conten	ts				
Lab cou	urse in	biochemistry: cell fractio	nation and character	isation, enzyme kine	tics.
Intende	ed leari	ning outcomes			
Studen tissues ons.	ts have as wel	e developed the ability to l as to use biochemical n	independently perfo nethods (e.g. determi	rm homogenisations ination of enzyme kin	and fractionations of cells and netics) to characterise the fracti-
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
P + P (n	o infor	mation on SWS (weekly o	contact hours) and co	urse language availa	able)
Methoo module is	d of ass creditab	s essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
worksh testate and Na practica Langua	op: the and Na chtesta al perfo ge of a	coretical and practical as: achtestate (pre and post- ate (pre and post-experim ormance (approx. 10 page ssessment: German or Er	signments to be com experiment exams) a nent exams, approx. 1 es) and written report nglish	pleted in groups of u nd lab course asses 5 minutes each), as (approx. 5 to 10 pag	p to 3 candidates, including Vor- sment components: Vortestate sessment and documentation of es)
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Workload					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Mactor	Master's degree (4 major) Food Chemistry (2012)				
mastel	muster s degree (1 mujor) rood enemistry (2012)				

Module title			Abbreviation			
Toxicol	ogy of	Food			o8-LMC-LMTox-122-mo1	
Module	e coord	inator		Module offered by		
holder	of the (Chair of Food Chemistr	/	Institute of Pharma	cy and Food Chemistry	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
9	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
2 seme	ster	graduate	In accordance with s nung über die Ausb mittelchemikerinne ning and examinatio No. II 1. Letter d and	In accordance with Section 2 Subsection 2 Sentence 2 APOLmCh (Veror- nung über die Ausbildung und Prüfung der Staatlich geprüften Lebens- mittelchemikerinnen und Lebensmittelchemiker, Regulation on the trai- ning and examination of state-certified food chemists) in connection wi No. II 1. Letter d and 2. Letter g of Annex 1 of APOLmCh.		
Conten	ts					
Harmfu ships); their bi chronic sessme	Il effect toxico ologica , carcin ent and	s of natural and synthe kinetics (absorption, d al effects; toxicology ar nogenic, mutagenic an definition of exposure	etic chemicals, toxicody istribution, biotransforr id animal testing; meth d teratogenic toxicity te limits and guidelines.	ynamics (receptor the mation, elimination); ods for toxicity testine ests); principles of ep	eory, dose-response relation- ; classification of toxicants and ng (acute, subacute, subchronic, pidemiological studies; risk as-	
Intende	ed lear	ning outcomes				
Students are familiar with the toxicokinetics and modes of toxic action of relevant natural and synthetic chemi- cals as well as with methods for toxicity testing. They have learned the principles of epidemiological studies. They know the steps involved in a risk assessment and in the definition of exposure limits and guidelines. Stu- dents are able to independently select an appropriate test for the solution of a given food toxicological question and are able to perform that test. Courses (type, number of weekly contact hours, language – if other than German) V + V + P (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: a) 1 to 3 written examinations (1 written examination: approx. 90 minutes or approx. 120 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examination in groups (groups of 2, ap- prox. 30 minutes) and lab course assessment components: Vortestate and Nachtestate (pre and post-experi- ment exams, approx. 15 minutes), assessment and documentation of practical performance (approx. 10 pages) and written report (approx. 5 to 10 pages) assessment: a) 1 to 3 written examinations (1 written examinations in groups (3 written examinations in approx. 40 or 90 minutes each) or b) oral examination (1 prov. 5 to 10 pages) assessment: a) 1 to 3 written examinations (1 written examinations in approx. 10 pages) and written report (approx. 5 to 10 pages) assessment: a) 1 to 3 written examinations (1 written examination: ap- prox. 90 minutes or approx. 120 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written ex- minutes or approx. 120 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written ex- minutes or approx. 120 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written ex- minutes or approx. 10 pages) assessment: a) 1 to 3 writ						
oral examination in groups (groups of 2, approx. 30 minutes) and lab course assessment components: Vorte- state and Nachtestate (pre and post-experiment exams, approx. 15 minutes), assessment and documentation of practical performance (approx. 10 pages) and written report (approx. 5 to 10 pages) Language of assessment: German or English						
Allocation of places						
Additional information						
Workload						
Teaching cycle						
Master's wi	ith 1 majo	r Food Chemistry (2012)	JMU Würzburg • ta record Maste	generated 26-Aug-2024 • ex er (120 ECTS) Lebensmittelche	am. reg. da- page 9 / 37 emie - 2012	

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

Module appears in

Master's degree (1 major) Food Chemistry (2012)

Master's with 1 major I	Food Chemistry (2012)
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Module title			Abbreviation			
Food La	aw, Tob	oacco Law, Feed Law and	Tangented Law		o8-LMC-LMRecht-12	22-m01
Module	e coord	inator		Module offered by		
holder	of the (Chair of Food Chemistry	- <u>-</u>	Institute of Pharma	cy and Food Chemis	try
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
2 seme	ester	graduate	In accordance with Section 2 Subsection 2 Sentence 2 APOLmCh (Veron nung über die Ausbildung und Prüfung der Staatlich geprüften Lebens- mittelchemikerinnen und Lebensmittelchemiker, Regulation on the trai ning and examination of state-certified food chemists) in connection w No. II 2. Letters h, i and j of Annex 1 of APOLmCh.			
Conten	ts					
a) Gene view of 1 Subso law and institut industr IEC 170 formity proced	eral foo the org ection a d gener ions ar y, aa) (oo star assess ures in	Id law, aa) Structure and ganisation and purpose Sentence 1 No. 2, aa) A ral administrative law, co ad bodies, ff) Legal acts Quality management sys ndards, OECD Principles sment including certifica laboratories and the for	I contents of food law, of official controls on administrative structur c) Administrative jurise of the EU. c) Overview stems in laboratories a of Good Laboratory P ation and testing, cc) H od industry.	bb) Structure and comproducts and tobacces at the federal and diction, dd) Offences of quality assurance and industry (DIN EN ractice (GLP)), bb) Grandbooks and docu	ontents of EU food la co products pursuan I state levels, bb) Co s and legal proceedin e procedures in labo ISO 9000 and EN 45 erman and EU legisla imentation of quality	aw. b) Over- t to Section institutional ings, ee) EU ratories and iooo or ISO/ ation on con- y assurance
Intende	ed lear	ning outcomes				
Studen basis fo They ha borator	its iden or their ave the ry Pract	tify foods, cosmetics, fe assessment. They know theoretical knowledge ice" standards.	eds, consumer goods v the relevant national to set up a quality mar	and tobacco produc and international st nagement system an	ts and use the approximate the second structures for all food d to work according	opriate legal law issues. to "Good La-
Course	S (type, r	number of weekly contact hours	, language — if other than Ger	rman)		
V + V (r	no infor	mation on SWS (weekly	contact hours) and co	ourse language avail	able)	
Metho module is	d of ass s creditab	sessment (type, scope, langu le for bonus)	age — if other than German, o	examination offered — if no	ot every semester, informati	ion on whether
a) 1 to 3 written examinations (1 written examination: approx. 90 minutes or approx. 120 minutes; 2 written ex- aminations: approx. 60 or 90 minutes each; 3 written examinations: approx. 60 minutes each) or b) oral exami- nation of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 mi- nutes)						
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Workload						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	e appea	nrs in				
Master's w	ith 1 majo	r Food Chemistry (2012)	JMU Würzburg ● ta record Maste	generated 26-Aug-2024 • ex r (120 ECTS) Lebensmittelche	am. reg. da- emie - 2012	page 11 / 37

Master's degree (1 major) Food Chemistry (2012)

Module title					Abbreviation
Special Food and Animal Feed					08-LMC-SpezLM-122-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
8	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate	By way of exception, additional prerequisites are listed in the section of assessments.		
Conten	ts				
Chemical constituents, production and analysis of particular foods and feeds, chemical changes caused in those foods and feeds during processing, storage and transportation as well as pharmacological and toxicological effects of their normal and abnormal constituents. Thorough knowledge of the chemistry of food constituents and methods for the analysis of particular foods and feeds including the interpretation of measured data with statistical methods.					
Intended learning outcomes					
Students are able to independently select relevant analysis parameters for the assessment of functional foods and feeds as well as foods/feeds containing genetically modified organisms, to independently select appropriate analytical methods, to independently apply those methods as well as to interpret the measured data with appropriate statistical methods. They are able to assess the foods/feeds on the basis of the analytical values.					
LOUISES (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.

- o8-LMC-SpezLM-1-122: V + V + P (no information on SWS (weekly contact hours) and course language available)
- 08-LMC-SpezLM-2-122: S (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 stated otherwise, successful completion of the module will require successful completion of all individual assessments.

Assessment in module component o8-LMC-SpezLM-1-122: Special Food and Animal Feed Special Food and Animal Feed Special Food and Animal Feed

- 6 ECTS, Method of grading: numerical grade
- assessment: a) 1 to 3 written examinations (1 written examination: approx. 90 minutes or approx. 120 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examinations: approx. 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) and lab course assessment components: Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), assessment and documentation of practical performance (approx. 10 pages) and written report (approx. 5 to 10 pages)
- Language of assessment: German or English
- Other prerequisites: In accordance with Section 2 Subsection 2 Sentence 2 APOLmCh (Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker, Regulation on the training and examination of state-certified food chemists) in connection with No. II 1. Letter a and No. II 2. Letter e of Annex 1 of APOLmCh.

Assessment in module component o8-LMC-SpezLM-2-122: Seminar of Animal Feed

- 2 ECTS, Method of grading: numerical grade
- written report (approx. 20 pages) and talk (approx. 20 minutes)
- Other prerequisites: In accordance with Section 2 Subsection 2 Sentence 2 APOLmCh (Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelche-

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miker, Regulation on the training and examination of state-certified food chemists) in connection with No. II 2. Letters c and d of Annex 1 of APOLmCh.

Allocation of places

Additional information

Workload

Teaching cycle

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

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Module appears in

Master's degree (1 major) Food Chemistry (2012)

Module title			Abbreviation		
Analysi ducts, a	Analysis and Evaluation of Foodstuffs, Cosmetics, Commodities, Tobacco Pro- ducts, and Animal Feed: practical course			ities, Tobacco Pro-	08-LMC-LMCP-122-m01
Module	coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme:	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatic No. II 1. Letter a and	Section 2 Subsectior Idung und Prüfung c n und Lebensmittelc on of state-certified f No. II 2. Letters a an	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with d c of Annex 1 of APOLmCh.
Conten	ts				
Methoo pretatio	ls for th on of m	ne analysis of foods, toba easured data with statist	acco products, cosme ical methods.	tics, consumer good	ls and feeds including the inter-
Intende	ed leari	ning outcomes			
Studen ducts, o thods a	ts are a cosmet is well a	ble to select and apply a ics, consumer goods or f as to assess the foods, to	n appropriate metho eeds. They are able to bbacco products, cos	d for the analysis of o interpret the meas metics, consumer go	particular foods, tobacco pro- ured data with statistical me- oods or feeds conclusively.
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
Ü + P (r	io infor	mation on SWS (weekly o	contact hours) and co	urse language avail	able)
Methoo module is	l of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
worksh testate nents: ^v mentat Langua	op: the (pre-e> Vortest ion of p ge of a	oretical and practical ass operiment exams) and Na ate and Nachtestate (pre practical performance (ap ssessment: German or En	signments to be comp achtestate (post-expe and post-experiment pprox. 10 pages) and nglish	pleted in groups of u riment exams) and/ t exams, approx. 15 written report (appro	up to 3 candidates, including Vor- or lab course assessment compo- minutes), assessment and docu- ox. 5 to 10 pages)
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Additio	nal info	ormation on module dura	tion: 1 to 2 semester	5.	
Workload					
Teaching cycle					
Referred to In LPO I (examination regulations for teaching-degree programmes)					
Module	Module appears in				
Master's degree (1 major) Food Chemistry (2012)					

Module title			Abbreviation		
Cosmetics, Commodities and Tobacco Products			Products		08-LMC-KBT-122-m01
Module coordinator				Module offered by	
holder	of the C	Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
4	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatic No. II 2. Letter a of A	Section 2 Subsectior Idung und Prüfung d n und Lebensmittelc on of state-certified f nnex 1 of APOLmCh.	2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with
Conten	ts				
Chemic change toxicolo	al cons s causo ogical e	stituents, production and ed in those products duri ffects of their normal and	analysis of cosmetic ng processing, storag d abnormal constitue	s, consumer goods a ge and transportatio nts.	and tobacco products. Chemical n as well as pharmacological and
Intende	ed learr	ning outcomes			
Student tics, co	ts are f nsume	amiliar with the chemistr r goods and tobacco proc	y of cosmetics. They ducts as well as to int	are able to use meth terpret measured da	ods for the analysis of cosme- ta with statistical methods.
Courses	5 (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V + V (n	o infor	mation on SWS (weekly o	contact hours) and co	ourse language availa	able)
Method module is	l of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
a) 1 to 3 aminati nation (nutes) Langua	writte ons: a of one ge of a	n examinations (1 writter oprox. 60 or 90 minutes o candidate each (approx. ssessment: German or Er	n examination: appro each; 3 written exami 20 minutes) or c) ora nglish	x. 90 minutes or app inations: approx. 60 l examination in grou	orox. 120 minutes; 2 written ex- minutes each) or b) oral exami- ups (groups of 2, approx. 30 mi-
Allocati	ion of p	laces			
Additio	nal inf	ormation			
Workload					
Peferred to in LPO L (examination regulations for teaching degree programmes)					
Module	appea	rs in			
Master'	Master's degree (1 major) Food Chemistry (2012)				

Module title			Abbreviation		
Environmental Analysis				08-LMC-UA-122-m01	
Module coordinator		Module offered by			
holder	of the C	Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme:	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 2. Letter g of A	Section 2 Subsectior Idung und Prüfung d n und Lebensmittelc on of state-certified f nnex 1 of APOLmCh.	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with
Conten	ts				
Toxic ef ring me	ffects o thods,	n the ecosystem; risk as environmental chemistry	sessment and definit / and analysis in biot	ion of exposure limit ic and abiotic enviro	ts and guidelines. (Bio)monito- nments.
Intende	ed learr	ning outcomes			
Studen toring a of pollu	ts are a Ind ana Itants a	ble to answer retrospect lytical methods and perf and their fate in the envir	ive questions in envi orming statistical and onment by performin	ronmental analysis, alyses of data. They g experiments in the	selecting appropriate (bio)moni- are able to assess the ecotoxicity lab.
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V + V +	Ü (no i	nformation on SWS (wee	kly contact hours) an	d course language a	vailable)
Methoo module is	l of ass creditab	e ssment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
a) 1 to 3 aminati nation (nutes) a Langua	y writte ions: aj of one o and wri ge of a	n examinations (1 writter pprox. 60 or 90 minutes candidate each (approx. tten report (approx. 3 to ssessment: German or Er	n examination: appro each; 3 written exami 20 minutes) or c) ora 6 pages) nglish	x. 90 minutes or app nations: approx. 60 l examination in grou	orox. 120 minutes; 2 written ex- minutes each) or b) oral exami- ups (groups of 2, approx. 30 mi-
Allocat	ion of p	olaces			
Additio	nal info	ormation			
Workload					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	appea	irs in	tra ()		
Master's degree (1 major) Food Chemistry (2012)					

Module title				Abbreviation	
Technology of Foodstuffs including water for human use, Cosmetics, Commo- dities, Tobacco Products, and Animal Feed				08-LMC-LMT-122-m01	
Module	e coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 1. Letter e and	Section 2 Subsectior Idung und Prüfung d n und Lebensmitteld on of state-certified f No. II 2. Letters b an	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with d d of Annex 1 of APOLmCh.
Conten	ts				
Basic u tion 1 S commin ons (he tation,	nit ope entenc nution, eating, acidific	erations in the production e 1 No. 2, cosmetics, con sieving, mixing, filtering, cooling and freezing, con cation).	and processing of fo sumer goods and fee , expressing, emulsifi centration, drying, di	oods, tobacco produceds; e.g. mechanical cation, centrifugatio stillation), biotechno	cts pursuant to Section 1 Subsec- operations (cleaning, sorting, on, extracting), thermal operati- ological processes (e.g. fermen-
Intende	ed leari	ning outcomes			
Studen	ts knov	v all relevant processes i	n food technology as	well as examples of	their application.
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V + E (n	io infor	mation on SWS (weekly o	contact hours) and co	urse language availa	able)
Methoo module is	d of ass creditab	s essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
a) 1 to 3 aminat nation nutes) Langua	3 writte ions: a of one and wri ge of a	n examinations (1 writter pprox. 60 or 90 minutes candidate each (approx. itten report (approx. 2 to ssessment: German or Er	n examination: appro. each; 3 written exami 20 minutes) or c) ora 5 pages) nglish	x. 90 minutes or app nations: approx. 60 l examination in grou	prox. 120 minutes; 2 written ex- minutes each) or b) oral exami- ups (groups of 2, approx. 30 mi-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Workload					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	irs in			
Master's degree (1 major) Food Chemistry (2012)					

Module title				Abbreviation		
Development and Validation of Methods in Food Analysis					08-LMC-MEV-122-m01	
Module	e coord	inator		Module offered by		
holder	of the (Chair of Food Chemistry	_	Institute of Pharma	cy and Food Chemistry	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme:	ster	graduate	In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 1. Letter a and	Section 2 Subsectior Idung und Prüfung d n und Lebensmittelc on of state-certified f No. II 2. Letters a an	a 2 Sentence 2 APOLmCh (Verord- ler Staatlich geprüften Lebens- hemiker, Regulation on the trai- ood chemists) in connection with d c of Annex 1 of APOLmCh.	
Conten	ts					
Theory lysis of	and pr foods,	actice of the developmen tobacco products, cosm	t as well as the statis etics, consumer good	tical validation of m s and feeds.	ethods for the quantitative ana-	
Intende	ed lear	ning outcomes				
Studen cosmet	ts are a ics, co	able to establish and vali nsumer goods and feeds	date a method for the	e quantitative analys	is of foods, tobacco products,	
Course	S (type, r	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V + P +	Ü (no i	nformation on SWS (wee	kly contact hours) an	d course language a	vailable)	
Methoo module is	d of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
lab cou nutes), to 10 pa Langua	rse ass assess ages) ge of a	sessment components: V sment and documentatio ssessment: German or Ei	ortestate and Nachte n of practical perform nglish	state (pre and post- ance (approx. 10 pa	experiment exams, approx. 15 mi- ges) and written report (approx. 5	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	Workload					
Teaching cycle						
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	irs in				
Master's degree (1 major) Food Chemistry (2012)						

Module title					Abbreviation
Current Research in Food Chemistry					08-LMC-LMCF-122-m01
Module coordinator				Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)	
15	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Working method finding	g with t ls in fo s.	he food chemistry literat od chemistry, solution of	ure and databases, c research problems, s	liscussion of recent i statistical analysis o	research findings and current f data, presentation of research
Intende	ed learr	ning outcomes			
Studen sent the	ts can i e result	research literature on a s in a presentation.	cientific problem, sol	ve it experimentally,	document this process, and pre-
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
S + S +	Ü + P (I	no information on SWS (v	weekly contact hours)) and course languag	ge available)
Methoo module is	d of ass creditab	e essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
assessı ges) an Langua	ment a d talk (ge of a	nd documentation of pra (approx. 20 minutes) ssessment: German or Ei	ctical performance (a nglish	pprox. 30 pages), w	ritten report (approx. 5 to 10 pa-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				
Module	e appea	irs in			
Master'	Master's degree (1 major) Food Chemistry (2012)				





Compulsory Electives

(15 ECTS credits)





Specialist Lab Course

(5 ECTS credits)

Module title				Abbreviation			
Advanced Laboratory Courses in the Toxicology of Food				08-LMC-WPV1-122-m01			
Module coordinator Module				Module offered by			
holder	ofthe	Chair of Food Chemis	try	Institute of Pharma	cy and Food Chemistry		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites	i			
1 semester graduate In accordance nung über die mittelchemike ning and exar		In accordance with nung über die Ausb mittelchemikerinne ning and examinatio No. II 1. Letter d and	Section 2 Subsection ildung und Prüfung o n und Lebensmittelc on of state-certified f l No. II 2. Letter g of A	n 2 Sentence 2 APOLmCh (Verord- der Staatlich geprüften Lebens- hemiker, Regulation on the trai- food chemists) in connection with Annex 1 of APOLmCh.			
Conten	ts						
Cell cu	lturing	techniques, extende	d toxicity tests (e.g. geno	toxicity testing, repo	rter gene assays).		
Intend	ed lear	ning outcomes					
Studen under g goods	its are a guidan or toba	able to culture adhere ce in order to determi cco products.	ent and suspension cells ne the biological potenti	independently. They al of constituents of	y are able to perform toxicity tests foods, cosmetics, consumer		
Course	S (type, r	number of weekly contact ho	ours, language — if other than Ge	rman)			
P (no ir	nformat	tion on SWS (weekly	contact hours) and cours	e language available	2)		
Metho module is	d of ass s creditab	sessment (type, scope, la ole for bonus)	anguage — if other than German,	examination offered — if no	ot every semester, information on whether		
lab cou nutes), to 10 p Langua	arse ass assess ages) age of a	sessment component sment and document ssessment: German	s: Vortestate and Nachte ation of practical perform or English	estate (pre and post- nance (approx. 10 pa	experiment exams, approx. 15 mi- ges) and written report (approx. 5		
Allocat	ion of _l	places					
Additio	onal inf	ormation					
Worklo	Workload						
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module	e appea	ars in					
Master's degree (1 major) Food Chemistry (2012)							

Module title				Abbreviation	
Advanced Laboratory Course in Environmental Analysis					08-LMC-WPV2-122-m01
Module	coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semester graduate In accor nung üb mittelch ning an		In accordance with S nung über die Ausbi mittelchemikerinner ning and examinatio No. II 1. Letter d and	n accordance with Section 2 Subsection 2 Sentence 2 APOLmCh (Verord- nung über die Ausbildung und Prüfung der Staatlich geprüften Lebens- nittelchemikerinnen und Lebensmittelchemiker, Regulation on the trai- ning and examination of state-certified food chemists) in connection with		
Conten	ts				
Trace a	nalysis	by gas or liquid chromat	ography-mass spectr	rometry.	
Intende	ed learr	ning outcomes			
Studen [.] environ	ts are a menta	able to perform qualitativ l samples using common	e and quantitative ar mass spectrometric	alyses of environme methods.	ental contaminants or residues in
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
P (no in	format	ion on SWS (weekly cont	act hours) and cours	e language available)
Methoo module is	l of ass creditab	s essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
lab cou nutes), to 10 pa Langua	rse ass assess ages) ge of a	sessment components: V sment and documentatio ssessment: German or Er	ortestate and Nachte n of practical perform nglish	state (pre and post- ance (approx. 10 pa	experiment exams, approx. 15 mi- ges) and written report (approx. 5
Allocat	ion of p	olaces			
Additio	nal info	ormation			
Worklo	ad				
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	appea	ars in			
Master'	Master's degree (1 major) Food Chemistry (2012)				



Additional Qualifications

(10 ECTS credits)

Module title Abbreviation					Abbreviation	
Industr	Industrial Internship 1 (Short) 08-LMC-WPZ1-122-m01					
Module	e coord	inator		Module offered by		
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Work p	laceme	nt in the field of food pro	duction or analysis.			
Intende	ed lear	ning outcomes				
Studen	ts have	e become familiar with th	e occupation of a foo	d chemist.		
Course	S (type, r	umber of weekly contact hours, l	anguage — if other than Ger	man)		
P (no in	Iformat	ion on SWS (weekly cont	act hours) and cours	e language available)	
Methoo module is	d of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
written Langua	report ge of a	(approx. 5 to 10 pages) ssessment: German or Ei	nglish			
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teachir	Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	e appea	ars in				
Master	's degr	ee (1 major) Food Chemis	try (2012)			

Module title Abbreviation				Abbreviation	
Industrial Internship 2 (Long)					08-LMC-WPZ2-122-m01
Module	e coord	inator		Module offered by	
holder	of the O	Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	(not) s	successfully completed			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Work p	laceme	nt in the field of food pro	duction or analysis.		
Intende	ed leari	ning outcomes			
Studen	ts have	e become familiar with th	e occupation of a foo	d chemist.	
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
P (no in	format	ion on SWS (weekly cont	act hours) and course	e language available)
Methoo module is	d of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
written Langua	report ge of a	(approx. 5 to 10 pages) ssessment: German or Er	nglish		
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Additio	nal info	ormation on module dura	tion: 1 to 2 semesters	S.	
Worklo	ad				
Teachir	ng cycl	e			
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	Module appears in				
Master	's degr	ee (1 major) Food Chemis	try (2012)		

Module title					Abbreviation
Safety	Evaluat	tion of Food			08-LMC-WPZ3-122-m01
Module	coord	inator		Module offered by	
holder	of the C	Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	(not) s	successfully completed			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Assess	ment o	f the safety of foods on th	ne basis of their cons	tituents.	
Intende	ed learr	ning outcomes			
Studen sessme	ts are a ent.	ble to assess the safety	of foods in accordanc	ce with applicable gu	uidelines for food safety as-
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
Ü (no ir	nformat	ion on SWS (weekly cont	tact hours) and cours	e language available	e)
Methoo module is	d of ass creditab	s essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
written Langua	report ge of a	(approx. 5 to 10 pages) ssessment: German or Ei	nglish		
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	Module appears in				
Master'	Master's degree (1 major) Food Chemistry (2012)				

Module title Abbreviation				Abbreviation	
Applied Food Law 08-LMC-WPZ					08-LMC-WPZ4-122-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	(not) s	successfully completed			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Assess	ment o	f foods on the basis of ap	oplicable food law.		
Intende	ed learı	ning outcomes			
Studen	ts are a	able to assess foods on t	he basis of applicable	e food law.	
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
Ü (no ir	format	tion on SWS (weekly cont	act hours) and cours	e language available	2)
Methoo module is	d of ass creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
written Langua	report ge of a	(approx. 5 to 10 pages) ssessment: German or Ei	nglish		
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
Teachir	ng cycl	e			
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	ins in			
Master	Master's degree (1 major) Food Chemistry (2012)				

Module title				Abbreviation	
Courses related to Food Chemistry outside of the Natural Se			side of the Natural So	ciences	08-LMC-WPZ5-122-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Food Chemistry	_	Institute of Pharma	cy and Food Chemistry
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)	
5	(not) s	successfully completed			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate	Please consult with	course advisory serv	vice.
Conten	ts				
This mo other Fa consult	odule g aculties t with th	ives students the opport s and are not explicitly in neir course advisors in ac	unity to transfer credi cluded in the acaden dvance.	its from chemistry-re nic regulations for th	elated courses that are offered by eir programmes. Students MUST
Intende	ed lear	ning outcomes			
Studen	ts have	e developed the knowled	ge and skills taught i	n the courses attend	led by them.
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	rman)	
V (no ir	nformat	ion on SWS (weekly cont	act hours) and cours	e language available	2)
Method module is	d of ass s creditab	essment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether
assess 2 writte oral exa prox. 3 Langua	ment: a en exan aminati o minu ge of a	a) 1 to 3 written examinat ninations: approx. 60 or 9 ion of one candidate each tes) or successful comple ssessment: German or En	ions (1 written examir 90 minutes each; 3 w h (approx. 20 minute etion as certified by th nglish	nation: approx. 90 m ritten examinations: s) or c) oral examina he lecturer	ninutes or approx. 120 minutes; approx. 60 minutes each) or b) tion in groups (groups of 2, ap-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	irs in			
Master	's degr	ee (1 major) Food Chemis	try (2012)		

Module title				Abbreviation		
Courses related to Food Chemistry within the Natural Sciences			ces	08-LMC-WPZ6-122-m01		
Module	e coord	inator		Module offered by		
holder	of the (Chair of Food Chemistry		Institute of Pharma	cy and Food Chemistry	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate	Please consult with	course advisory serv	<i>v</i> ice.	
Conten	ts					
This mo other Fa consult	odule g acultie: with tl	ives students the opport s and are not explicitly in heir course advisors in ac	unity to transfer credi cluded in the acaden dvance.	its from chemistry-re nic regulations for th	elated courses that are offered by eir programmes. Students MUST	
Intende	ed lear	ning outcomes				
Studen	ts have	e developed the knowled	ge and skills taught i	n the courses attend	led by them.	
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V (no in	format	ion on SWS (weekly cont	act hours) and cours	e language available	e)	
Methoo module is	d of ass creditab	sessment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
assessi 2 writte oral exa prox. 30 Langua	ment: a en exan aminat o minu ge of a	a) 1 to 3 written examinat ninations: approx. 60 or g ion of one candidate eac tes) or successful comple ssessment: German or E	ions (1 written examin 90 minutes each; 3 w h (approx. 20 minute etion as certified by th nglish	nation: approx. 90 m ritten examinations: s) or c) oral examina he lecturer	ninutes or approx. 120 minutes; approx. 60 minutes each) or b) tion in groups (groups of 2, ap-	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teaching cycle						
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	urs in				
Master	's degr	ee (1 major) Food Chemis	stry (2012)			

Module title					Abbreviation	
Foreign Studies (short)					08-APM1-102-m01	
Module	e coord	inator		Module offered by		
Erasmu	is prog	ramme coordinator Chem	ie (Chemistry)	Faculty of Chemistr	y and Pharmacy	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
5	(not) s	successfully completed				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate	Admission prerequis	site to assessment: I	regular attendance of placement.	
Conten	ts					
Practic change course compe	al cours progra offerec tent co	se to be completed at uni ammes such as Erasmus of I in the context of the Ma ordinator in advance.	versities abroad. Stu etc. The contents of t ster's programme in (dents may complete he course should co Chemistry (120 ECTS	e this course in the context of ex- rrespond to the contents of a lab credits); please consult with the	
Intende	ed lear	ning outcomes				
Studen have a	ts are f cquired	amiliar with procedures a subject-specific skills as	and processes used a s well as language an	at universities in cou d interpersonal skill	ntries other than Germany. They s.	
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
P (no ir	format	ion on SWS (weekly cont	act hours) and cours	e language available	2)	
Metho module is	d of ass s creditab	sessment (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
report (Langua	(2 page ige of a	s); proof of having comp ssessment: German or Er	leted lab course nglish; language of th	e respective placem	ient country where required	
Allocat	ion of _l	olaces				
Additio	onal inf	ormation				
Worklo	ad					
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master	's degr	ee (1 major) Chemistry (2	010)			
Master's degree (1 major) Food Chemistry (2012)						

Module title					Abbreviation	
Foreign Studies (long)					08-APM2-102-m01	
Module coordinator				Module offered by		
Erasmus programme coordinator Chem			ie (Chemistry)	try) Faculty of Chemistry and Pharmacy		
ECTS	CTS Method of grading		Only after succ. compl. of module(s)			
10	(not) s	successfully completed				
Duration Module level		Other prerequisites				
2 semester graduate		graduate	Admission prerequis	site to assessment:	regular attendance of placement.	
Conten	ts					
Practical course to be completed at universities abroad. Students may complete this course in the context of ex- change programmes such as Erasmus etc. The contents of the course should correspond to the contents of a lab course offered in the context of the Master's programme in Chemistry (120 ECTS credits); please consult with the competent coordinator in advance.						
Intende	ed lear			,,		
Studen have ad	ts are f cquired	amiliar with procedures a l subject-specific skills as	and processes used a swell as language an	d interpersonal skill	ntries other than Germany. They s.	
Course	S (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
P (no ir	format	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
report (2 pages); proof of having completed lab course Language of assessment: German or English; language of the respective placement country where required						
Allocation of places						
Additional information						
Workload						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master's degree (1 major) Chemistry (2010)						
Master's degree (1 major) Food Chemistry (2012)						

Module title					Abbreviation	
Tutoring 1 (practical course)					08-WRM1-102-m01	
Module coordinator				Module offered by		
Dean of Studies Chemie (Chemistry)			Faculty of Chemistry and Pharmacy			
ECTS	S Method of grading Only after succ. compl. of module(s)					
5	(not) s	successfully completed				
Duratio	Duration Module level		Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
This mo Chemis	odule g stry and	ives students the opport I Pharmacy and learn hov	unity to teach a tutor v to present and teac	ial accompanying a l h scientific topics in	ecture offered by the Faculty of an appropriate manner.	
Intende	ed learı	ning outcomes				
Studen needs.	ts are a	able to teach students in	earlier stages of thei	r degrees and tailor t	heir teaching to those students'	
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
Ü (no ir	nformat	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
preparation of materials for demonstrations and exercises Language of assessment: German or English						
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Workload						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master's degree (1 major) Chemistry (2010)						
Master's degree (1 major) Food Chemistry (2012)						
Master's degree (1 major) FUKUS Pharmacy (2012)						

Module title				Abbreviation		
Tutoring 2 (practical course)					08-WRM2-102-m01	
Module coordinator				Module offered by		
Dean of Studies Chemie (Chemistry)			Faculty of Chemistry and Pharmacy		y and Pharmacy	
ECTS	Metho	od of grading	Only after succ. compl. of module(s)			
5	(not) s	successfully completed				
Duration Mod		Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
This module gives students the opportunity to teach a tutorial accompanying a lecture offered by the Faculty of Chemistry and Pharmacy and learn how to present and teach scientific topics in an appropriate manner.						
Intende	ed learı	ning outcomes				
Studen needs.	ts are a	able to teach students in	earlier stages of thei	r degrees and tailor t	heir teaching to those students'	
Course	S (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
Ü (no ir	nformat	tion on SWS (weekly cont	act hours) and cours	e language available	e)	
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
preparation of materials for demonstrations and exercises Language of assessment: German or English						
Allocation of places						
Additio	nal inf	ormation				
Workload						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master's degree (1 major) Chemistry (2010)						
Master's degree (1 major) Food Chemistry (2012)						





Thesis (30 ECTS credits)

Module title					Abbreviation	
Master Thesis					08-LMC-MA-122-m01	
Module coordinator				Module offered by		
holder of the Chair of Food Chemistry			Institute of Pharmacy and Food Chemistry		cy and Food Chemistry	
ECTS	CTS Method of grading		Only after succ. compl. of module(s)			
30	o numerical grade		o8-LMC-LMCF and, where applicable, specific modules/module compo- nents as specified by supervisor (cf. Section 15 Subsection 2 FSB (sub- ject-specific provisions)).			
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Students search for literature on a problem in food chemistry, select appropriate methods for solution of that problem and use those methods in the laboratory. They prepare a written account of their work and deliver an academic presentation on their findings.						
Intende	ed lear	ning outcomes				
Studen	ts inde	pendently investigate a p	problem in food chem	nistry.		
Course	S (type, r	umber of weekly contact hours, l	anguage — if other than Ger	man)		
C (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)						
written thesis (approx. 40 pages) and presentation (poster or talk, approx. 20 minutes), weighted 4:1 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)						
Module appears in						
Master's degree (1 major) Food Chemistry (2012)						