Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Chemistry as a Master's with 1 major

with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Chemistry and Pharmacy

Examination regulations version: 2010

Abbreviations used:

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB:

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

Information on assessment procedures:

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

ASPO2009

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

14-Jul-2010 (2010-31)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

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

Compulsory Electives (90 ECTS credits)
Divided up into 3 focus subjects (25 ECTS credits each) + additional qualifications (15 ECTS credits).

Inorganic Chemistry (25 ECTS credits)

Compulsory Courses (20 ECTS credits)

08-ACM1-102-m01 **Advanced Inorganic Chemistry**

ECTS	20	Duration	2 semester	Method of grading	numerical grade	Modul level	graduate

Courses	This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-ACM1-1-102: S + S (no information on SWS (weekly contact hours) and course language available) • 08-ACM1-2-102: P (no information on SWS (weekly contact hours) and course language available)
Method of assessment	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 08-ACM1-1-102:** Inorganic Chemistry for advanced students Inorganic Chemistry for advanced students • 10 ECTS, Method of grading: numerical grade • a) 1 to 3 written examinations (90 to 120 minutes each) or b) oral examination of one candidate each (30 minutes) or c) oral examination in groups (groups of 2, 45 minutes) • Language of assessment: German or English **Assessment in module component 08-ACM1-2-102:** Inorganic Chemistry practical course for advanced • 10 ECTS, Method of grading: (not) successfully completed • practical work with lab report (20 pages) and talk (15 minutes) • Language of assessment: German or English

Compulsory Electives (5 ECTS credits)

08-ACM2-102-m01 **Bioinorganic Chemistry**

ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate

Courses	S (no information on SWS (weekly contact hours) and course language available)
Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English

08-ACM3-102-m01 **Solid state chemistry and inorganic materials**

ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate

Courses	S (no information on SWS (weekly contact hours) and course language available)
Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English

08-HKM2-102-m01	**Advanced organometallic chemistry and its application in homogeneous catalysis**								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						
Organic Chemistry (25 ECTS credits)									
Compulsory Courses (15 ECTS credits)									
08-OCM-SYNT-102-m01	**Modern Synthetic Method**								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).						
08-OCM-NMRMS-102-m01	**Advanced NMR- and Mass Spectrometry**								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes) Language of assessment: German or English						
08-OCM-AKP1-102-m01	**Advanced Research Project 1**								
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate	
	Courses		P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment		talk (approx. 15 minutes) and log (approx. 15 to 20 pages) Language of assessment: German or English						

Compulsory Electives (10 ECTS credits)								
08-OCM-NAT-102-m01	**Modern Aspects of Natural Product Chemistry and Biological Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						
	Participants and allocation of places	Chemistry Master's: no restrictions. Biochemistry Master's: 20 places. Places will be allocated by lot.						
08-OCM-FM-102-m01	**Organic Functional Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						
08-HKM1-102-m01	**Organo- and Biocatalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						
08-SCM1-102-m01	**Supramolecular Chemistry (Basics)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English						
08-SCM3-102-m01	**Bioorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English						

08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
Physical Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-PCM1-102-m01	**Advanced Physical Chemistry**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-PCM1-1-102: S + Ü (no information on SWS (weekly contact hours) and course language available) • 08-PCM1-2-102: P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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 08-PCM1-1-102:** Laser Spectroscopy Laser Spectroscopy • 5 ECTS, Method of grading: numerical grade • written examination (90 minutes) or oral examination (20 minutes) • Language of assessment: German or English **Assessment in module component 08-PCM1-2-102:** Advanced Physical Chemistry (Lab) • 5 ECTS, Method of grading: (not) successfully completed • Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 15 minutes), log (approx. 15 pages) • Language of assessment: German or English					
Compulsory Electives (15 ECTS credits)								
08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					

08-PCM2-102-m01	**Chemical Dynamics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM3-102-m01	**Nanoscale Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM4-102-m01	**Ultrafast spectroscopy and quantum-control**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM5-102-m01	**Physical chemistry of supramolecular assemblies**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English					
08-PCM6-102-m01	**Physical Chemistry (Advanced Lab)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation (20 minutes) Language of assessment: German or English					
08-TCM1-102-m01	**Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					

Biochemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-BC-MOL-102-m01	**Molecular Biology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		1 written examination (90 minutes) or 2 written examinations (60 to 90 minutes) Language of assessment: German or English					
08-BC-MOLP-102-m01	**Molecular Biology Practical Course**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes), log (approx. 5 to 10 pages) Language of assessment: German or English					
	Participants and allocation of places		Number of places: 12. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (80% of places): grade achieved in module 08-BC; among applicants with the same grade, places will be allocated by lot. Quota 2 (20% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.					
Compulsory Electives (15 ECTS credits)								
08-BC-092-m01	**Biochemistry**							
	ECTS	6	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (1 written examination: approx. 90 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)					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					

08-BCP-092-m01	**Biochemistry Lab**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		pre/post-experiment examination talks (Vortestate and Nachtestate, approx. 15 minutes each), practical work (log, approx. 5 to 10 pages) Assessment offered: once a year, summer semester					
	Modules successfully completed		08-BC					
	Participants and allocation of places		Number of places: 24. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (80% of places): grade achieved in module 08-BC; among applicants with the same grade, places will be allocated by lot. Quota 2 (20% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.					
08-ACM2-102-m01	**Bioinorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-OCM-NAT-102-m01	**Modern Aspects of Natural Product Chemistry and Biological Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's: no restrictions. Biochemistry Master's: 20 places. Places will be allocated by lot.					
08-HKM1-102-m01	**Organo- and Biocatalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					

08-BC-VPMM-102-m01	**Practical course "Molecular Machines" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-BC-VPPD-102-m01	**Practical course "Protein Degradation in Eukaryotes" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-BC-VPRB-102-m01	**Practical course "RNA Biochemistry" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-BC-VPSB-102-m01	**Practical course "Structural Biology" for advanced**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-MCM3-102-m01	**Principles of drug design**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.					
08-PH-KAC-092-m01	**Clinical and Analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (120 minutes)					
08-PH-KACP-092-m01	**Clinical and Analytical Chemistry (practical course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		examination talks (Testate, approx. 15 minutes each), log (approx. 5 to 10 pages)					

Functional Materials (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-FS1-101-m01	**Materials Science 1 (Basic Introduction)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes)					
08-OCM-FM-102-m01	**Organic Functional Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-FMM-MP-102-m01	**Lab Course Materials Science**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (15 minutes), assessment of practical performance, log (5 to 10 pages) Language of assessment: German or English					
08-FMM-PA-102-m01	**Project Work**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 15 minutes) and log (approx. 15 pages) Language of assessment: German or English					

Compulsory Electives (5 ECTS credits)								
08-NT-101-m01	**Chemically and biologically inspired Nanotechnology for Materials Synthesis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-NT-1-101: V (no information on SWS (weekly contact hours) and course language available) • 08-NT-2-101: V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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 08-NT-1-101:** Chemically and biologically inspired Nanotechnology for Materials Synthesis • 2 ECTS, Method of grading: numerical grade • oral examination (approx. 15 minutes) **Assessment in module component 08-NT-2-101:** From Biomineralisation to biologically inspired Materials Synthesis • 3 ECTS, Method of grading: numerical grade • oral examination (approx. 20 minutes)					
08-FS2-101-m01	**Materials Science 2 (The Major Material Groups)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes)					
08-ACM3-102-m01	**Solid state chemistry and inorganic materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-SCM1-102-m01	**Supramolecular Chemistry (Basics)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English					
08-PCM3-102-m01	**Nanoscale Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					

08-FMM-CT-102-m01	**Molecular Materials (Lecture)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation (approx. 30 minutes) and a) 1 to 3 written examinations (1 written examination: 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)					
Homogeneous Catalysis (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-HKM2-102-m01	**Advanced organometallic chemistry and its application in homogeneous catalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-HKM1-102-m01	**Organo- and Biocatalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-HKM3-102-m01	**Practical course "Homogeneous catalysis"**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		practical work with lab report (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German or English					

Compulsory Electives (5 ECTS credits)								
08-OCM-SYNT-102-m01	**Modern Synthetic Method**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-HKM4-102-m01	**Advanced transition metal chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
Medicinal Chemistry (25 ECTS credits)								
Compulsory Courses (25 ECTS credits)								
08-MCM3-102-m01	**Principles of drug design**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.					

08-MCM1-102-m01	**Practical course medicinal chemistry**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 20 minutes), assessment of practical performance, written report (approx. 30 to 50 pages) Language of assessment: German or English					
08-MCM2-102-m01	**Pharmaceutical/Medicinal Chemistry**							
	ECTS	10	Duration	3 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		oral examination of one candidate each (approx. 30 minutes) Language of assessment: German or English					
Supramolecular Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-SCM1-102-m01	**Supramolecular Chemistry (Basics)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English					
08-SCM2-102-m01	**Supramolecular Chemistry (Practical Course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		practical work, logs (approx. 5 pages each) Language of assessment: German or English					
Compulsory Electives (15 ECTS credits)								
08-ACM2-102-m01	**Bioinorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					

08-OCM-FM-102-m01	**Organic Functional Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-SCM3-102-m01	**Bioorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-PCM3-102-m01	**Nanoscale Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM5-102-m01	**Physical chemistry of supramolecular assemblies**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English					

08-MCM3-102-m01	**Principles of drug design**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.					
Theoretical Chemistry (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-TCM1-102-m01	**Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-TCM3-102-m01	**Programming in Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		completion and discussion of approx. 5 programming exercises as well as talk (approx. 45 minutes) Language of assessment: German or English					

08-TCAP-102-m01	**Theoretical Chemistry - Project work**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	This module has 3 components; information on courses listed separately for each component. • 08-TCAP-1-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-2-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-3-102: P (no information on language and number of weekly contact hours available)						
	Method of assessment	This module has the following 3 assessment components. To pass the module as a whole students must pass two out of these three assessment components. **Assessment component to module component 08-TCAP-1-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenpaketdynamik • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-2-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenfunktionsmethoden • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-3-102:** Theoretische Chemie Arbeitsgruppenpraktikum Dichtefunktionaltheorie • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English						
	Additional Information	Additional information on module duration: 4 weeks..						
Compulsory Electives (5 ECTS credits)								
08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes) Language of assessment: German or English						
	other prerequisites	Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).						
08-MCM3-102-m01	**Principles of drug design**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	presentation with discussion (approx. 30 minutes) Language of assessment: German or English						
	Participants and allocation of places	Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.						

Compulsory Electives Additional Qualifications (15 ECTS credits)								
08-NT-101-m01	**Chemically and biologically inspired Nanotechnology for Materials Synthesis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-NT-1-101: V (no information on SWS (weekly contact hours) and course language available) • 08-NT-2-101: V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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 08-NT-1-101:** Chemically and biologically inspired Nanotechnology for Materials Synthesis • 2 ECTS, Method of grading: numerical grade • oral examination (approx. 15 minutes) **Assessment in module component 08-NT-2-101:** From Biomineralisation to biologically inspired Materials Synthesis • 3 ECTS, Method of grading: numerical grade • oral examination (approx. 20 minutes)					
08-FS1-101-m01	**Materials Science 1 (Basic Introduction)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes)					
08-FS2-101-m01	**Materials Science 2 (The Major Material Groups)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes)					
03-TR-072-m01	**Toxicology and legal studies**							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes)					
08-BC-092-m01	**Biochemistry**							
	ECTS	6	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (1 written examination: approx. 90 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)					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					

08-BCP-092-m01	**Biochemistry Lab**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		pre/post-experiment examination talks (Vortestate and Nachtestate, approx. 15 minutes each), practical work (log, approx. 5 to 10 pages) Assessment offered: once a year, summer semester					
	Modules successfully completed		08-BC					
	Participants and allocation of places		Number of places: 24. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (80% of places): grade achieved in module 08-BC; among applicants with the same grade, places will be allocated by lot. Quota 2 (20% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.					
08-ACM1-102-m01	**Advanced Inorganic Chemistry**							
	ECTS	20	Duration	2 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-ACM1-1-102: S + S (no information on SWS (weekly contact hours) and course language available) • 08-ACM1-2-102: P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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 08-ACM1-1-102:** Inorganic Chemistry for advanced students Inorganic Chemistry for advanced students • 10 ECTS, Method of grading: numerical grade • a) 1 to 3 written examinations (90 to 120 minutes each) or b) oral examination of one candidate each (30 minutes) or c) oral examination in groups (groups of 2, 45 minutes) • Language of assessment: German or English **Assessment in module component 08-ACM1-2-102:** Inorganic Chemistry practical course for advanced • 10 ECTS, Method of grading: (not) successfully completed • practical work with lab report (20 pages) and talk (15 minutes) • Language of assessment: German or English					
08-ACM2-102-m01	**Bioinorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					

08-ACM3-102-m01	**Solid state chemistry and inorganic materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-HKM2-102-m01	**Advanced organometallic chemistry and its application in homogeneous catalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-OCM-SYNT-102-m01	**Modern Synthetic Method**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-OCM-NMRMS-102-m01	**Advanced NMR- and Mass Spectrometry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes) Language of assessment: German or English					
08-OCM-AKP1-102-m01	**Advanced Research Project 1**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 15 minutes) and log (approx. 15 to 20 pages) Language of assessment: German or English					

08-OCM-NAT-102-m01	**Modern Aspects of Natural Product Chemistry and Biological Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's: no restrictions. Biochemistry Master's: 20 places. Places will be allocated by lot.					
08-OCM-FM-102-m01	**Organic Functional Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-HKM1-102-m01	**Organo- and Biocatalysis**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-SCM1-102-m01	**Supramolecular Chemistry (Basics)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English					
08-SCM3-102-m01	**Bioorganic Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					

08-TCM2-102-m01	**Computational Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-PCM1-102-m01	**Advanced Physical Chemistry**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-PCM1-1-102: S + Ü (no information on SWS (weekly contact hours) and course language available) • 08-PCM1-2-102: P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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 08-PCM1-1-102:** Laser Spectroscopy Laser Spectroscopy • 5 ECTS, Method of grading: numerical grade • written examination (90 minutes) or oral examination (20 minutes) • Language of assessment: German or English **Assessment in module component 08-PCM1-2-102:** Advanced Physical Chemistry (Lab) • 5 ECTS, Method of grading: (not) successfully completed • Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 15 minutes), log (approx. 15 pages) • Language of assessment: German or English					
08-PCM2-102-m01	**Chemical Dynamics**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM3-102-m01	**Nanoscale Materials**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-PCM4-102-m01	**Ultrafast spectroscopy and quantum-control**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					

08-PCM5-102-m01	**Physical chemistry of supramolecular assemblies**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English					
08-PCM6-102-m01	**Physical Chemistry (Advanced Lab)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation (20 minutes) Language of assessment: German or English					
08-TCM1-102-m01	**Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (90 minutes) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-BC-MOL-102-m01	**Molecular Biology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		1 written examination (90 minutes) or 2 written examinations (60 to 90 minutes) Language of assessment: German or English					
08-BC-MOLP-102-m01	**Molecular Biology Practical Course**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes), log (approx. 5 to 10 pages) Language of assessment: German or English					
	Participants and allocation of places		Number of places: 12. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (80% of places): grade achieved in module 08-BC; among applicants with the same grade, places will be allocated by lot. Quota 2 (20% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.					
08-BC-VPMM-102-m01	**Practical course "Molecular Machines" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					

08-BC-VPPD-102-m01	**Practical course "Protein Degradation in Eukaryotes" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-BC-VPRB-102-m01	**Practical course "RNA Biochemistry" for advanced students**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-BC-VPSB-102-m01	**Practical course "Structural Biology" for advanced**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-MCM3-102-m01	**Principles of drug design**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German or English					
	Participants and allocation of places		Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.					
08-PH-KAC-092-m01	**Clinical and Analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (120 minutes)					
08-PH-KACP-092-m01	**Clinical and Analytical Chemistry (practical course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		examination talks (Testate, approx. 15 minutes each), log (approx. 5 to 10 pages)					
08-FMM-MP-102-m01	**Lab Course Materials Science**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (15 minutes), assessment of practical performance, log (5 to 10 pages) Language of assessment: German or English					

08-FMM-PA-102-m01	**Project Work**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 15 minutes) and log (approx. 15 pages) Language of assessment: German or English					
08-FMM-CT-102-m01	**Molecular Materials (Lecture)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		presentation (approx. 30 minutes) and a) 1 to 3 written examinations (1 written examination: 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)					
08-HKM3-102-m01	**Practical course "Homogeneous catalysis"**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		practical work with lab report (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German or English					
08-HKM4-102-m01	**Advanced transition metal chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examination in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, the module coordinator will choose the method to be used for the module component in the current semester at the beginning of the course. Language of assessment: German or English					
08-MCM1-102-m01	**Practical course medicinal chemistry**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 20 minutes), assessment of practical performance, written report (approx. 30 to 50 pages) Language of assessment: German or English					
08-MCM2-102-m01	**Pharmaceutical/Medicinal Chemistry**							
	ECTS	10	Duration	3 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		oral examination of one candidate each (approx. 30 minutes) Language of assessment: German or English					

08-SCM2-102-m01	**Supramolecular Chemistry (Practical Course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		practical work, logs (approx. 5 pages each) Language of assessment: German or English					
08-TCM3-102-m01	**Programming in Theoretical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		completion and discussion of approx. 5 programming exercises as well as talk (approx. 45 minutes) Language of assessment: German or English					
08-TCAP-102-m01	**Theoretical Chemistry - Project work**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		This module has 3 components; information on courses listed separately for each component. • 08-TCAP-1-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-2-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-3-102: P (no information on language and number of weekly contact hours available)					
	Method of assessment		This module has the following 3 assessment components. To pass the module as a whole students must pass two out of these three assessment components. **Assessment component to module component 08-TCAP-1-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenpaketdynamik • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-2-102:** Theoretische Chemie Arbeitsgruppenpraktikum Wellenfunktionsmethoden • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English **Assessment component to module component 08-TCAP-3-102:** Theoretische Chemie Arbeitsgruppenpraktikum Dichtefunktionaltheorie • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English					
	Additional Information		Additional information on module duration: 4 weeks..					
08-WRM1-102-m01	**Tutoring 1 (practical course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		preparation of materials for demonstrations and exercises Language of assessment: German or English					

08-WRM2-102-m01	**Tutoring 2 (practical course)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		preparation of materials for demonstrations and exercises Language of assessment: German or English					
08-APM1-102-m01	**Foreign Studies (short)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		report (2 pages); proof of having completed lab course Language of assessment: German or English; language of the respective placement country where required					
	other prerequisites		Admission prerequisite to assessment: regular attendance of placement.					
08-APM2-102-m01	**Foreign Studies (long)**							
	ECTS	10	Duration	2 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		report (2 pages); proof of having completed lab course Language of assessment: German or English; language of the respective placement country where required					
	other prerequisites		Admission prerequisite to assessment: regular attendance of placement.					
Thesis (30 ECTS credits)								
08-MA-102-m01	**Master's Thesis**							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		no courses assigned					
	Method of assessment		written thesis Language of assessment: German or English					
	other prerequisites		Where applicable, specific modules as specified by supervisor.					