Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Annex SFB

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

with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Faculty of Chemistry and Pharmacy

Examination regulations version: 2013

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)):

23-Sep-2013 (2013-110) except for mandatory electives added in Fast Track procedure at a later time

09-Dec-2014 (2014-81)

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 (30 ECTS credits)								
03-4S1IMM-BC-132-m01	**Immunology for students of biochemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 45 minutes) Assessment offered: once a year, summer semester Language of assessment: German or English					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 16 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					
03-4S1VIR-BC-132-m01	**Virology for students of biochemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S + P (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (approx. 20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete varies according to subject area but will not exceed a maximum of 4 hours). Students will be informed about the method and length of the assessment prior to the course. Assessment offered: once a year, summer semester Language of assessment: German or English					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 18 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					
03-4S1HUG-BC-132-m01	**Human genetics for students of biochemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 30 minutes)					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 5 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					

03-PBC-132-m01	**Pathobiochemistry**							
	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. • 03-PBC-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available) • 03-PBC-2-132: 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 03-PBC-1-092:** Basics in Pathobiochemistry Basics in Pathobiochemistry • 2 ECTS, Method of grading: numerical grade • written examination (approx. 90 minutes) • Language of assessment: German or English **Assessment in module component 03-PBC-2-132:** Pathobiochemistry Practical Course • 3 ECTS, Method of grading: (not) successfully completed • assessment of practical performance, Nachtestate (post-experiment exams: examination talks, approx. 15 minutes each), logs (approx. 20 pages) • Assessment offered: once a year, summer semester • Language of assessment: German or English						
	Participants and allocation of places	Information on the allocation of places will be listed separately for each module component. • 03-PBC-2-132: Biochemie (Biochemistry) Bachelor's: 6 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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. • 03-PBC-1-092: --						

08-BC-MOLP-111-m01	**Molecular Biology Lab**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes). Students will be informed about the method and length of the assessment prior to the course. Assessment offered: once a year, winter semester Language of assessment: German or English					
	Modules successfully completed		08-BC (module component 08-BC-1 only)					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 24 places. Chemie (Chemistry) Master's: 6 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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. Selection process Chemie (Chemistry) Master's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): grade of module 08-BC; among applicants with the same grade, places will be allocated by lot. Quota 2 (one third 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.					
03-ZBP-132-m01	**Cell biology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 60 minutes) Language of assessment: German or English					
	Modules successfully completed		08-BC (module component 08-BC-1 only)					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 12 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					

03-MTUB-132-m01	**Molecular Tumor Biology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes). Students will be informed about the method and length of the assessment prior to the course. Assessment offered: once a year, winter semester Language of assessment: German or English					
	Modules successfully completed		08-BC (module component 08-BC-1 only)					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 12 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					
07-5S2Mi-Z2-BC-132-m01	**Specific Microbiology 2 for Students of Biochemistry**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (approx. 20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete varies according to subject area but will not exceed a maximum of 4 hours). Students will be informed about the method and length of the assessment prior to the course.					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 6 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.					

<table>
<tr><td>08-OC4-102-m01</td><td colspan="8">Organic Chemistry 4</td></tr>
<tr><td></td><td>ECTS</td><td>10</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 08-OC4-1-102: V + Ü (no information on SWS (weekly contact hours) and course language available)
• 08-OC4-2-102: P (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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-OC4-1-102: Organic Chemistry 4 Organic Chemistry 4
• 5 ECTS, Method of grading: numerical grade
• 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)
• Language of assessment: German or English
• Only after successful completion of module components: 08-OC1 or 08-OC1-GHR
• 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).
Assessment in module component 08-OC4-2-102: Organic Chemistry - advanced laboratory course for students of chemistry
• 5 ECTS, Method of grading: (not) successfully completed
• pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes each), log (approx. 5 to 10 pages)
• Assessment offered: once a year, winter semester
• Language of assessment: German, English
• Only after successful completion of module components: 08-OC3 (module component 08-OC3-2 only) or 08-OC3P</td></tr>
<tr><td></td><td colspan="3">other prerequisites</td><td colspan="5">By way of exception, additional prerequisites are listed in the section on assessments.</td></tr>
<tr><td></td><td colspan="3">Referred to in LPO I</td><td colspan="5">§ 62 (1) 2. Chemie "Organische und Bioorganische Chemie"</td></tr>
<tr><td>07-4BFMZ4-BC-132-m01</td><td colspan="8">Bioinformatics for Advanced Students in Biochemistry</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">log (approx. 10 to 20 pages)
Language of assessment: German or English</td></tr>
<tr><td></td><td colspan="3">Participants and allocation of places</td><td colspan="5">Biochemie (Biochemistry) Bachelor's: 4 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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.</td></tr>
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08-AVP5-BC-132-m01	**Advanced lab (abridged)**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 20 pages) Language of assessment: German or English					
	Additional Information		Additional information on module duration: 3 weeks.					
08-AVP10-BC-132-m01	**Advanced lab**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		log (approx. 30 pages) Language of assessment: German or English					
	Additional Information		Additional information on module duration: 6 weeks.					
03-98-PGN-092-m01	**Introductory Neurobiology for students of biomedicine**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		methods of assessment: a) written examination (45 to 60 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or e) presentation (20 to 30 minutes)					
	other prerequisites		Admission prerequisite to assessment: regular attendance of courses (lectures excluded) as specified at the beginning of the course.					
08-BC-AMP-141-m01	**Current Methods of Protein Chromatography**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes). Students will be informed about the method and length of the assessment prior to the course. Assessment offered: once a year, winter semester Language of assessment: German or English					
	Participants and allocation of places		Biochemie (Biochemistry) Bachelor's: 24 places. Selection process Biochemie (Biochemistry) Bachelor's: Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third 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 Courses (118 ECTS credits)								
03-5S2ST-BC-132-m01	**Structural Biology**							
	ECTS	10	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		a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (approx. 20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete varies according to subject area but will not exceed a maximum of 4 hours). Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German or English					
	Modules successfully completed		08-BC (module component 08-BC-1 only)					
07-1A1ZO-BC-132-m01	**General Biology for students of biochemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + V + V + V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		4 written examinations (including multiple choice questions): 3 examinations: 60 minutes each (graded); 1 examination: 30 minutes (ungraded); weighted 1:1:1:1					

08-AC1-BC-111-m01	**Inorganic Chemistry 1**							
	ECTS	16	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 3 module components. Information on courses will be listed separately for each module component. • 08-AC1-BC-2-092: P (no information on SWS (weekly contact hours) and course language available) • 08-AC1-BC-3-092: V (no information on SWS (weekly contact hours) and course language available) • 08-AC1-1-102: V + V + Ü (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-AC1-BC-2-092:** Practical course of Inorganic Chemistry 1 for Biochemistry Majors • 4 ECTS, Method of grading: (not) successfully completed • Vortestate (pre-experiment exams, approx. 15 minutes each), assessment of practical performance (log approx. 5 to 10 pages), Nachtestate (post-experiment exams, approx. 15 minutes each) • Assessment offered: once a year, winter semester **Assessment in module component 08-AC1-BC-3-092:** Accompanying lecture to the practical course of Inorganic Chemistry 1 for Biochemistry Majors • 2 ECTS, Method of grading: numerical grade • 2 written examinations (approx. 45 minutes each), weighted 1:1 **Assessment in module component 08-AC1-1-102:** Principles of Inorganic Chemistry Principles of Inorganic Chemistry Principles of Inorganic Chemistry • 10 ECTS, Method of grading: numerical grade • a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: 60 or 90 minutes each; 3 written examinations: 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) • Language of assessment: German or English • 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).					
	other prerequisites		By way of exception, additional prerequisites are listed in the section on assessments.					
	Referred to in LPO I		§ 42 (1) 1. Chemie "Allgemeine und Anorganische Chemie" und "Physikalische und Analytische Chemie" § 62 (1) 1. Chemie "Allgemeine und Anorganische Chemie"; "Physikalische und Analytische Chemie"					
08-OC1-092-m01	**Organic Chemistry 1**							
	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		a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: 60 or 90 minutes each; 3 written examinations: 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)					
	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).					
	Referred to in LPO I		§ 62 (1) 2. Chemie "Organische und Bioorganische Chemie"					

08-OC2-102-m01	**Organic Chemistry 2**							
	ECTS	9	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + 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) Language of assessment: German, English					
	Modules successfully completed		08-OC1					
	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-OC3P-112-m01	**Organic Chemistry - laboratory course for students of biochemistry**							
	ECTS	7	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		Vortestate (pre-experiment exams, approx. 15 minutes each), assessment of practical performance (log approx. 5 to 10 pages), Nachtestate (post-experiment exams, approx. 15 minutes each) Assessment offered: once a year, summer semester					
	Modules successfully completed		08-OC1 and 08-AC1-BC (module component 08-AC1-BC-2 only)					
08-PC1-092-m01	**Physical Chemistry 1**							
	ECTS	8	Duration	1 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: 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)					
	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-PC2V-BC-132-m01	**Physical Chemistry 2 for Biochemistry Majors**							
	ECTS	9	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		a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: 60 or 90 minutes each; 3 written examinations: 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)					
	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).					
	Referred to in LPO I		§ 62 (1) 1. Chemie "Allgemeine und Anorganische Chemie"; "Physikalische und Analytische Chemie"					

<table>
<tr><td>08-PC2P-132-m01</td><td colspan="8">Practical course of Physical Chemistry for Biochemistry Majors</td></tr>
<tr><td></td><td>ECTS</td><td>6</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>(not) successfully completed</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">P (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">Vortestate (pre-experiment exams), assessment of practical performance, Nachtestate (post-experiment exams), examination talks (approx. 15 minutes each), logs (approx. 5 to 10 pages)
Assessment offered: once a year, winter semester</td></tr>
<tr><td></td><td colspan="3">Modules successfully completed</td><td colspan="5">08-PC1 (module component 08-PC1-1 only)</td></tr>
<tr><td>08-BAN-092-m01</td><td colspan="8">Bioanalytics</td></tr>
<tr><td></td><td>ECTS</td><td>8</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 08-BAN-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available)
• 08-BAN-2-092: Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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-BAN-1-092: Principles of Bioanalytics Principles of Bioanalytics
• 3 ECTS, Method of grading: numerical grade
• a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes). Students will be informed about the method and length of the assessment prior to the course.
• Language of assessment: German or English
Assessment in module component 08-BAN-2-092: Bioanalytics (practical course)
• 5 ECTS, Method of grading: (not) successfully completed
• a) log (approx. 20 pages) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) Students will be informed about the method and length of the assessment prior to the course.
• Assessment offered: once a year, summer semester
• Language of assessment: German or English</td></tr>
</table>

<table>
<tr><td>08-BC-132-m01</td><td colspan="8">Principles of Biochemistry</td></tr>
<tr><td></td><td>ECTS</td><td>6</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 08-BC-1-132: V + Ü (no information on SWS (weekly contact hours) and course language available)
• 08-BC-2-132: V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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-BC-1-132: Principles of Biochemistry 1 Principles of Biochemistry 1
• 3 ECTS, Method of grading: numerical grade
• written examination (approx. 60 to 90 minutes)
Assessment in module component 08-BC-2-132: Principles of Biochemistry 2 Principles of Biochemistry 2
• 3 ECTS, Method of grading: numerical grade
• written examination (approx. 60 to 90 minutes)</td></tr>
<tr><td>08-BCB-CP-132-m01</td><td colspan="8">Biochemistry for Biochemistry Majors (Exercises)</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>(not) successfully completed</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">a) log (approx. 20 pages) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) Students will be informed about the method and length of the assessment prior to the course.
Assessment offered: once a year, summer semester</td></tr>
<tr><td>08-BC-MOL-122-m01</td><td colspan="8">Molecular Biology for Biochemistry students</td></tr>
<tr><td></td><td>ECTS</td><td>6</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 03-GTBS-1-092: V (no information on SWS (weekly contact hours) and course language available)
• 08-BC-MOL-1-122: V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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 03-GTBS-1-092: Genetic Engineering and Biosafety
• 1 ECTS, Method of grading: (not) successfully completed
• written examination (approx. 30 minutes)
Assessment in module component 08-BC-MOL-1-122: Molecular Biology Molecular Biology
• 5 ECTS, Method of grading: numerical grade
• a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes). Students will be informed about the method and length of the assessment prior to the course.
• Language of assessment: German or English</td></tr>
<tr><td></td><td colspan="3">Modules successfully completed</td><td colspan="5">08-BC (module component 08-BC-1 only)</td></tr>
</table>

10-M-MCB-132-m01	**Mathematics for students in Chemistry and Biology**							
	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 to 120 minutes)					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises (approx. 25 to 30 hours).					
11-EFNF-072-m01	**Introduction to Physics for Students of Non-physics-related Minor Subjects**							
	ECTS	7	Duration	2 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. 120 minutes)					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.					
11-PFNF-072-m01	**Practical Course Physics for Students of Non-physics-related Minor Subjects**							
	ECTS	3	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		a) oral test (approx. 15 minutes) during experiment and b) ungraded written examination (approx. 90 minutes)					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.					
08-VS-BC-132-m01	**Consolidation Seminar**							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		oral examination (approx. 30 minutes) on a paper written by the candidate Language of assessment: German or English					
Thesis (12 ECTS credits)								
08-BA-BC-132-m01	**Bachelor Thesis in Biochemistry**							
	ECTS	12	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		no courses assigned					
	Method of assessment		written thesis (50 to 70 pages) Language of assessment: German or English					
	Additional Information		Additional information on module duration: 10 weeks.					
Subject-specific Key Skills								
07-M-BST-132-m01	**Mathematical Biology and Biostatistics**							
	ECTS	4	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. 60 minutes)					

41-IK-NW1-101-m01	**Information Literacy for Students of the Natural Sciences (Basic Level)**							
	ECTS	2	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 minutes) or b) preparing and delivering a presentation with slides (approx. 10 minutes or approx. 5 minutes and approx. 1 page) or c) completing exercises (approx. 10 exercises) or d) presentation without slides (approx. 20 to 30 minutes) or e) preparing and delivering a presentation with slides (approx. 5 minutes) and completing exercises (approx. 5 exercises) or f) presentation without slides (approx. 10 to 15 minutes) and completing exercises (approx. 5 exercises)					
	Participants and allocation of places		Number of places: 5-50. There is a restricted number of places. If necessary, places will be allocated as follows: Students of the degree programmes of the respective subject-specific focuses will be given preferential consideration. The remaining places, if and when any become available, will be allocated to students of the other natural sciences degree programmes. In each of the above-mentioned groups, 30% of places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. The remaining 70% of places will each be allocated by lot.					
41-IK-NW2-101-m01	**Information Literacy for Students of the Natural Sciences (Advanced Level)**							
	ECTS	2	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 minutes) or b) preparing and delivering a presentation with slides (approx. 10 minutes or approx. 5 minutes and approx. 1 page) or c) completing exercises (approx. 10 exercises) or d) presentation without slides (approx. 20 to 30 minutes) or e) preparing and delivering a presentation with slides (approx. 5 minutes) and completing exercises (approx. 5 exercises) or f) presentation without slides (approx. 10 to 15 minutes) and completing exercises (approx. 5 exercises)					
	other prerequisites		Knowledge and skills equivalent to those achieved in the basic module desirable.					
	Participants and allocation of places		Number of places: 10 to 50. There is a restricted number of places. If necessary, places will be allocated as follows: Students of the degree programmes of the respective subject-specific focuses will be given preferential consideration. The remaining places, if and when any become available, will be allocated to students of the other natural sciences degree programmes. In each of the above-mentioned groups, 30% of places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. The remaining 70% of places will each be allocated by lot.					
06-B-P2T-F2-102-m01	**Philosophy 2**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 90 minutes)					
	other prerequisites		Admission prerequisite to assessment: regular attendance of seminar (a maximum of 2 incidents of unexcused absence).					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): maximum 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot.					
07-3A3BI-132-m01	**Bioinformatics**							
	ECTS	2	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 20 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)						
03-FOR-BC-092-m01	**Contemporary Research in Biochemistry**							
	ECTS	2	Duration	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	attendance of 80% of talks						
03-Phys-092-m01	**Physiology**							
	ECTS	3	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 (30 multiple choice questions)						
08-EP-132-m01	**Practical Course - external**							
	ECTS	10	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	log (approx. 30 pages) or talk (approx. 20 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 6 weeks.						
08-EPK-132-m01	**Practical Course - external, abridged**							
	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	log (approx. 20 pages) or talk (approx. 15 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 3 weeks.						
08-AP-132-m01	**Practical Course - abroad**							
	ECTS	10	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	log (approx. 30 pages) or talk (approx. 20 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 6 weeks.						
08-APK-132-m01	**Practical Course - abroad**							
	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	log (approx. 20 pages) or talk (approx. 15 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 3 weeks.						

08-LP-132-m01	**Practical lab course**							
	ECTS	10	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	log (approx. 30 pages) or talk (approx. 20 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 6 weeks.						
08-LPK-132-m01	**Practical lab course, abridged**							
	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	log (approx. 20 pages) or talk (approx. 15 minutes) Language of assessment: German or English						
	Additional Information	Additional information on module duration: 3 weeks.						
08-WIRE1-132-m01	**Scientific lecturing 1**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	preparation of materials for demonstrations and exercises (approx. 120 hours total) Language of assessment: German or English						
08-WIRE2-132-m01	**Scientific lecturing 2**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	preparation of materials for demonstrations and exercises (approx. 120 hours total) Language of assessment: German or English						
08-AFBC1-111-m01	**Contemporary Research in Biochemistry 1**							
	ECTS	3	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	presentation (approx. 10 minutes) Language of assessment: German or English						
08-AFBC2-111-m01	**Contemporary Research in Biochemistry 2**							
	ECTS	3	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	presentation (approx. 10 minutes) Language of assessment: German or English						
08-AFBC3-111-m01	**Contemporary Research in Biochemistry 3**							
	ECTS	3	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	presentation (approx. 10 minutes) Language of assessment: German or English						

08-BPS1-111-m01	**Biochemistry (practical course) 1**							
	ECTS	1	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		short log (approx. 1 page) Language of assessment: German or English					
08-BPS2-111-m01	**Biochemical Practical Seminar 2**							
	ECTS	1	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		short log (approx. 1 page) Language of assessment: German or English					
08-BPS3-111-m01	**Biochemical Practical Seminar 3**							
	ECTS	1	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		short log (approx. 1 page) Language of assessment: German or English					
08-AWA-132-m01	**Guidance in scientific practice**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		preparing and supervising student lab courses: assessment to be successfully completed (type and length of assessment to be specified at the beginning of the course) Language of assessment: German or English					
	Modules successfully completed		08-BAN					

<table>
<tr><td rowspan="5">08-AC3-BC-131-m01</td><td colspan="8">Inorganic Chemistry 3 for Biochemistry Majors</td></tr>
<tr><td>ECTS</td><td>9</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td colspan="2">Courses</td><td colspan="6">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 08-AC3-BC-2-131: P (no information on SWS (weekly contact hours) and course language available)
• 08-AC3-1-102: V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td colspan="2">Method of assessment</td><td colspan="6">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-AC3-BC-2-131: Inorganic Chemistry 2 (lab) for Biochemistry Majors
• 5 ECTS, Method of grading: (not) successfully completed
• pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes each), log (approx. 5 to 10 pages)
• Language of assessment: German or English
Assessment in module component 08-AC3-1-102: Elemental Organic Chemistry Elemental Organic Chemistry
• 4 ECTS, Method of grading: numerical grade
• 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)
• Language of assessment: German, 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).</td></tr>
<tr><td colspan="2">Modules successfully completed</td><td colspan="6">08-OC3P</td></tr>
<tr><td colspan="2">other prerequisites</td><td colspan="6">By way of exception, additional prerequisites are listed in the section on assessments.</td></tr>
<tr><td rowspan="5">08-PC3-092-m01</td><td colspan="8">Physical and Theoretical Chemistry 3: Symmetry and Quantum Chemistry</td></tr>
<tr><td>ECTS</td><td>6</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td colspan="2">Courses</td><td colspan="6">V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td colspan="2">Method of assessment</td><td colspan="6">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)</td></tr>
<tr><td colspan="2">other prerequisites</td><td colspan="6">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).</td></tr>
</table>

08-AS1-BC-132-m01	**Chemistry of the Elements and Analytical Chemistry for Biochemistry Majors**							
	ECTS	11	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-AN1-BC-2-132: P (no information on SWS (weekly contact hours) and course language available) • 08-AS1-1-102: V + 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-AN1-BC-2-132:** Analytical Chemistry (lab) for Biochemistry Majors • 5 ECTS, Method of grading: (not) successfully completed • pre/post-experiment examination talks (Vor-/Nachtestate, approx. 15 minutes each), log (approx. 5 to 10 pages) • Assessment offered: once a year, summer semester • Language of assessment: German or English **Assessment in module component 08-AS1-1-102:** Chemistry of the elements Chemistry of the elements • 6 ECTS, Method of grading: numerical grade • 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) • Language of assessment: German or English					
	Modules successfully completed		08-AC1 (module component 08-AC1-4 only) and 08-OC3 (module component 08-OC3-2 only)					
	Referred to in LPO I		§ 62 (1) 1. Chemie "Allgemeine und Anorganische Chemie"; "Physikalische und Analytische Chemie"					
08-OC4-VL-141-m01	**Organic Chemistry 4 - lecture**							
	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		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (approx. 20 to 30 minutes) or c) oral examination in groups (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes). Students will be informed about the type and length of assessment prior to the course. Language of assessment: German or English					
08-BC-ZQN3-141-m01	**Additional Qualification in Natural Sciences 3**							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		V (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) or f) successful completion as certified by lecturer. Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German or English					
	other prerequisites		Please consult with academic advisory service in advance.					

<table>
<tr><td rowspan="4">08-BC-ZQN5-141-m01</td><td colspan="8">Additional Qualification in Natural Sciences 5</td></tr>
<tr><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>(not) successfully completed</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td>Courses</td><td colspan="7">V (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td>Method of assessment</td><td colspan="7">a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) or f) successful completion as certified by lecturer. Students will be informed about the method and length of the assessment prior to the course.
Language of assessment: German or English</td></tr>
<tr><td>other prerequisites</td><td colspan="7">Please consult with academic advisory service in advance.</td></tr>
<tr><td rowspan="4">08-BC-EQN3-141-m01</td><td colspan="8">Completive Qualification in Natural Sciences 3</td></tr>
<tr><td>ECTS</td><td>3</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td>Courses</td><td colspan="7">V (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td>Method of assessment</td><td colspan="7">a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) or f) successful completion as certified by lecturer. Students will be informed about the method and length of the assessment prior to the course.
Language of assessment: German or English</td></tr>
<tr><td>other prerequisites</td><td colspan="7">Please consult with academic advisory service in advance.</td></tr>
<tr><td rowspan="4">08-BC-EQN5-141-m01</td><td colspan="8">Completive Qualification in Natural Sciences 5</td></tr>
<tr><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td>Courses</td><td colspan="7">V (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td>Method of assessment</td><td colspan="7">a) written examination (approx. 60 to 90 minutes) or b) log (approx. 20 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 40 minutes) or d) presentation (approx. 30 minutes) or f) successful completion as certified by lecturer. Students will be informed about the method and length of the assessment prior to the course.
Language of assessment: German or English</td></tr>
<tr><td>other prerequisites</td><td colspan="7">Please consult with academic advisory service in advance.</td></tr>
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