

## **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: 2009

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:

## ASP02009

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

## 03-Aug-2010 (2010-41)

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 spe	o be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y							
	Method of as	ssessm	ent								
	Only after su completion of		ıl if applica	if applicable							
	Other prereq	uisites	if applica	if applicable							
	Participants on of places		ocati- if applica	if applicable							
	Additional in	format	ion if applica	if applicable							
	Referred to in	n LPO I	if applica	if applicable (examination regulations for teaching-degree programmes)							

<b>Compulsory Course</b>	es (118 E	CTS cre	edits)									
03-5S2ST-092-	Structu	ral Bio	logy 1									
mo1	ECTS	10	Duratio	1	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate		
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method				a) written examination (approx. 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 (groups of up to 3 candidates, approx. 60 minutes) or e) presentation (approx. 20 to 30 minutes)							
08-AC1-BC-092-	Inorgar	nic Che	mistry 1									
mo1	ECTS	16	Duration	1	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate		
	Courses			•	<ul> <li>This module comprises 3 module components. Information on courses will be listed separately for each module component.</li> <li>08-AC1-BC-2-092: P (no information on SWS (weekly contact hours) and course language available)</li> <li>08-AC1-BC-3-092: V (no information on SWS (weekly contact hours) and course language available)</li> <li>08-AC1-1-072: V + V + Ü (no information on SWS (weekly contact hours) and course language available)</li> </ul>							
	Method	d of ass	essment	Asses for Bio Asses les of	sment in module of 4 ECTS, Method of Vortestate (pre-endangers), Nacht Assessment offersment in module of the cochemistry Majors a ECTS, Method of 2 written examinations and the cochemistry Majors and the cochemistry Majors and ECTS, Method of the cochemistry Majors and ECTS, Method of the cochemistry M	component o8-AC1 of grading: (not) suc experiment exams, a estate (post-experi red: once a year, wi component o8-AC1 of grading: numeric ations (approx. 45 in component o8-AC1 cry of grading: numeric examinations (1 writions: 60 minutes exi	BC-2-092: Practical concessfully completed approx. 15 minutes earnent exams, approx. 15 minutes earner exams, approx. 16 minutes earner semester all grade ninutes each), weight 1-072: Principles of Irral grade ten examination: 90 minutes each	ourse of Inor ch), assessm 5 minutes ea ying lecture ed 1:1 norganic Che minutes; 2 w	al completion of granic Chemistrenent of practical ach) to the practical emistry Principle written examinat	ts as specified below. Unless fall individual assessments.  y 1 for Biochemistry Majors  al performance (log approx. 5 to course of Inorganic Chemistry 1  es of Inorganic Chemistry Principtions: 60 or 90 minutes each; 3 (approx. 20 minutes) or c) oral		
08-0C3P-092-m01	Organi	c Chem	istry - lab	oratory	course for stude	nts of biochemistry			'			
	ECTS 7 Duratio			1	1 semester	Method of gradi	ng (not) successfully	completed	Modul level	undergraduate		
	Course	S		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)								

08-PC2-BC-092-	Physical Chemistry 2 for Biochemistry Majors: Thermodynamics, Kinetics, Electrochemistry												
mo1	ECTS 15 Duratio	n 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.  • o8-PC2-BC-2-092: P (no information on SWS (weekly contact hours) and course language available)  • o8-PC2-1-092: 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.											
		<ul> <li>Assessment in module component o8-PC2-BC-2-o92: Physical Chemistry 2 for Biochemistry Majors: Thermodynamics, Kinetics, Electrochemistry</li> <li>6 ECTS, Method of grading: (not) successfully completed</li> <li>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)</li> <li>Assessment offered: once a year, winter semester</li> <li>Assessment in module component o8-PC2-1-o92: Thermodynamics, Kinetics, Electrochemistry Thermodynamics, Kinetics, Electrochemistry</li> <li>9 ECTS, Method of grading: numerical grade</li> <li>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)</li> <li>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).</li> </ul>											
	other prerequisites	By way of exception, additional prerequisites are listed in the section on assessments.											
	Referred to in LPO I	§ 62 (1) 1. Chemie "Allgemeine und Anorganische Chemie"; "Physikalische und Analytische Chemie"											
11-EFNF-072-m01	Introduction to Physics for Students of Non-physics-related Minor Subjects												
	ECTS 7 Duratio												
	Courses	V + V (no information on SWS (weekly contact hours) and course language available)											
	Method of assessment	written examination (approx. 120 minutes)											
	Participants and allo- cation 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 Physic	s for Students of Non-physics-related Minor Subjects											
	ECTS 3 Duratio	n 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 allo- cation of places	Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.											

08-0C2-092-m01	Organic Chemistry 2												
	ECTS	9	Duratio	1	1 semester	Method of grading numerical grade	Modul level	undergraduate					
	Courses	S		V + Ü	+ V (no informatio	n on SWS (weekly contact hours) and course langua	age available)						
	Method	l of asse	essment		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 in groups (groups of 2, approx. 30 minutes)								
08-PC1-092-m01	Physica	al Chem	istry 1	•									
	ECTS	8	Duratio	n 1 semester		Method of grading numerical grade	Modul level	undergraduate					
	Courses			V + Ü	V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			writte	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 pi	rerequis	sites	ning	of the course (usua	to assessment: successful completion of exercises ally 70% of exercises to be successfully completed) ats of unexcused absence).							
07-1A1ZO-BC-092-		l Biolog	y for stu	dents	of biochemistry								
mo1	ECTS	5	Duratio		1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Courses			V + V	V + V + V + V (no information on SWS (weekly contact hours) and course language available)								
					4 written examinations (3 examinations: 60 minutes each; 1 examination: 30 minutes; including multiple choice questions), weighted 3:3:3:1								
08-BAN-092-m01	Bioanal	•											
	ECTS	8	Duratio	า	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Courses	S		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)									
	Method	l of asse	essment			lule comprises the assessments in the individual m ssful completion of the module will require success							
				<ul> <li>Assessment in module component o8-BAN-1-092: Principles of Bioanalytics Principles of Bioanalytics</li> <li>3 ECTS, Method of grading: numerical grade</li> <li>a) written examination (approx. 6o 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.</li> <li>Language of assessment: German or English</li> <li>Assessment in module component o8-BAN-2-092: Bioanalytics (practical course)</li> <li>5 ECTS, Method of grading: (not) successfully completed</li> <li>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.</li> <li>Assessment offered: once a year, summer semester</li> <li>Language of assessment: German or English</li> </ul>									

08-BCBC-092-m01	Bioche	mistry f	or Biology	y Majo	rs								
	ECTS	11	Duration	1	2 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			This n	This module comprises 2 module components. Information on courses will be listed separately for each module component.  • o8-BC-1-092: V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)  • o8-BCBCP-1-092: 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.									
				mistry • • • • Asses	Principles of Biod 6 ECTS, Method (a) 1 to 3 written (a) minutes each; 3 v 20 minutes) or c) Other prerequisit ses as specified regular attendances ment in module 5 ECTS, Method (a) log (approx. 2 in groups (groups Students will be	chemistry of grading: numerical gexaminations (1 written examinations: a) oral examination in ges: Admission prerequat the beginning of the ce of exercises (usuall component o8-BCBCP of grading: (not) succeso pages) or b) oral exists of 2: approx. 30 minusers	grade n examination: approapprox. 60 minutes earoups (groups of 2, aluisite to assessment: ne course (usually 70 ly a maximum of 2 ince to a maximum of 2 ince to a maximum of 2 ince to a maximum of 3 ince to a mination of one can utes, groups of 3: appethod and length of the second	ox. 90 minutes; 2 written each) or b) oral examination pprox. 30 minutes) successful completion of e% of exercises to be succidents of unexcused abse for Biology Majors (Exercididate each (approx. 20 n	ses) ninutes) or c) oral examination sentation (approx. 30 minutes)				
	other p	rerequi	sites	By wa	y of exception, ad	ditional prerequisites	are listed in the secti	on on assessments.					

08-BC-MOL-092-	Molecular Biology												
mo1	ECTS	6	Duratio	n	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S		This module comprises 2 module components. Information on courses will be listed separately for each module component.  • 08-BC-MOL-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available)  • 03-GTBS-1-092: V (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass	essment	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.									
			essfully	Assessment in module component o8-BC-MOL-1-o92: Molecular Biology Lab Molecular Biology Lab  • 5 ECTS, Method of grading: numerical grade  • a) written examination (approx. 6o 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 o3-GTBS-1-o92: Genetic Engineering and Biosafety  • 1 ECTS, Method of grading: (not) successfully completed  • written examination (approx. 30 minutes)  o8-BC (module component o8-BC-1 only)									
	comple												
08-KOLL-BC-092-			esis Collo	<u> </u>	1	1			T				
mo1		3	Duratio		1 semester		ng numerical grade		Modul level	undergraduate			
	Course			K (no information on SWS (weekly contact hours) and course language available)									
	Method of assessment			final colloquium (approx. 30 minutes) Language of assessment: German or English									
10-M-MCB-101-	Mather	matics	for studer	ts in C	hemistry and Biol	ogy							
mo1	ECTS	5	Duratio	n	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S	,	V + Ü (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass	essment	writte	n examination (ap	prox. 90 to 120 min	utes)						
	other prerequisites			Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the cordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the restails at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek a assessment. If students have obtained the qualification for admission to assessment over the course of the sem turer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quadmission to assessment anew and have to register anew, too.						lify for admission to assessment idents about the respective de- ition of will to seek admission to ne course of the semester, the lec- es will be admitted to assessment			

08-0C1-092-m01	Organic Chemistry 1												
	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S	·	V + Ü	(no information on	SWS (weekly contact	hours) and course language a	vailable)					
	Method	l of ass	sessment	writte	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			ning	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).								
	Referre	d to in	LPO I	§ 62	(1) 2. Chemie "Organ	nische und Bioorgani	sche Chemie"						
Compulsory Elective	/es (30 E	CTS cre	edits)										
03-PBC-092-m01	Pathob	iochen	nistry										
	ECTS 5 Duratio			n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course			•	This module comprises 2 module components. Information on courses will be listed separately for each module component.  o3-PBC-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available)  o3-PBC-2-092: P (no information on SWS (weekly contact hours) and course language available)								
		oants a	nd allo-	Asse:	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 o3-PBC-1-o92: 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 o3-PBC-2-o92: 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, winter semester  Language of assessment: German or English  Information on the allocation of places will be listed separately for each module component.  o3-PBC-1-o92:								
	cation	oi piace	es	<ul> <li>03-PBC-1-092:</li> <li>03-PBC-2-092: 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.</li> </ul>									

08-AVP5-BC-092-	Advanced lab											
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate				
	Courses	-	Ü (no	(no information on SWS (weekly contact hours) and course language available)								
	Method of asse	essment		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.								
				Language of assessment: German or English								
08-AVP10-BC-092-	Advanced lab											
mo1	ECTS 10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	1				ırs) and course language availa						
	Method of asse	essment	a) log	(approx. 20 pages)	or b) oral examination	on of one candidate each (appr	ox. 20 minutes)	or c) oral examination in groups				
								x. 30 minutes) Students will be				
				ned about the methonage of assessment:		assessment prior to the course	•					
03-ZBP-092-m01	Cell biology		Lange	age of assessment.	German or English							
05 251 092 11101	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses					hours) and course language av						
	Method of asse	essment		n examination (appr		, , , , , , , , , , , , , , , , , , , ,						
				age of assessment:								
	Participants an					es. Selection process Biochemi						
	cation of place	5						g to the following quotas: Quota pplicants 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-092-m01	Molocular Tum	or Piolog		,								
03-111101-092-11101	ECTS 5	Duration		1 semester	Method of grading	numorical grado	Modul level	undergraduate				
		Duratio				rs) and course language availa		undergraduate				
	Courses  Method of asse							nination of one candidate each				
	Method of asse	essment	(appr	ox. 20 minutes) or d	oprox. 60 to 90 mmu oral examination in	groups of up to 3 candidates (	s) or c) oral exar groups of 2: apr	prox. 30 minutes, groups of 3: ap-				
			prox.	40 minutes) or d) pr	esentation (approx.			he method and length of the as-				
				nent prior to the cou		-4						
				sment offered: once		ster						
	Participants an	ıd allo-				nemie (Riochemistry) Rachelor'	s. Should the ni	umber of applications exceed the				
	cation of place		Number of places: 12. 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								
						ie (Biochemistry) Master's: allo		and places re-allocated as they				

03-4S1IM-101-m01	Immun	ology 1														
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate							
	Course	S			03-4S1IM-1IM-101:	V + Ü (no information	. Information on courses will be n on SWS (weekly contact hour SWS (weekly contact hours) a	rs) and course la								
	Method	d of asse	essment		ssessment in this module comprises the assessments in the individual module components as specified below. Unless tated otherwise, successful completion of the module will require successful completion of all individual assessments.											
				Asses	2 ECTS, Method of written examinatio Language of assess Other prerequisites tion of the respecti ssment in module co 3 ECTS, Method of presentation (approximate) Assessment offered Language of assess Other prerequisites	grading: numerical g n (approx. 30 minute sment: German or En s: Admission prerequ ve exercises as spec mponent 03-4S1IM- grading: (not) succes ox. 20 to 30 minutes d: once a year, summ sment: German or En s: Admission prerequ	es) glish glish iisite to assessment: regular a ified at the beginning of the co 2IM-101: Practical Course Imm asfully completed ) ner semester glish	ittendance of executive of executive unology	ercises and successful comple-							
	other p	rerequis	sites	By wa	y way of exception, additional prerequisites are listed in the section on assessments.											
	cation	oants an		chem accor amor ject s locati (Biolo follow dits. Bach will b Bach of the the n licant ces, t dule have derat Place will b durin	istry) Bachelor's: Sheding to the following applicants with the emesters of the respect by lot. A waiting lip ogy) Bachelor's: Shows: Places will primar Should the module belor's degree subject a allocated to stude elor's degree subject application-oriente umber of places avaits from the other quot here will be a uniform component that are esuccessfully completion. A waiting list will swill primarily be aller ranked according to their studies or of a successfuldes or of a successful a	ould the number of a g quotas: Quota 1 (two e same average graduective applicant; amplist will be maintained uld the number of aprily be allocated to stope used in other subjet Biologie (Biology) whits of the Bachelor's to Computational Madusubject Biologie (Bilable in one quota expression for the concerned will be allocated at least one other located according to to the number of ECT all module compone	applications exceed the number of thirds of places): current average, places will be allocated by long applicants with the same of and places re-allocated as the plications exceed the number sudents of the Bachelor's degreects, there will be two quotas: with 180 ECTS credits and 5% of degree subject Biologie (Biolothematics and Mathematik (Miology) (as well as potentially exceed the number of application within one module component ourses of one module component of the replaces re-allocated as they be the applicants' previous acad S credits they have achieved ants in the subject of Biologie (lime of application. This will be supplication. This will be	er of available place grade of su lot. Quota 2 (one number of subject ey become available place subject Biology 95% of places with 60 ECTS lathematics), each to students of ot ons, the remaining, several course nent. In this case edure. In this prospective module ecome available. emic achieveme and their average Biology) (excludict of sudenes as follows edone as follows	ccessfully completed modules; third of places) number of subct semesters, places will be alable. Selection process Biologie ces, places will be allocated as gie (Biology) with 180 ECTS crevill be allocated to students of the num of one participant in total) credits and to students of the ch with 180 ECTS credits, as part her 'importing' subjects). Should not places will be allocated to apps with a restricted number of place, places on all courses of a motocedure, applicants who already will be given preferential consi-Selection process group 1 (95%): nts. For this purpose, applicants grade of all assessments taken ng Chemie (Chemistry), Physik : First, applicants will be ranked,							
Bachelor's with 1 major Bi	iochemistry	/ (2009)		(Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked,    JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 025 - - H 2009   page 10 / 17   ly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking												
				will b licant	e calculated as the s s with the same ranl	sum of these two rank king, places will be a	kings, and places will be allocallocallocallocallocallocallocallo	ated according to itative ranking o	ants' position in a third ranking this third ranking. Among apport otherwise by lot. Selection property places): total number of ECTS							

03-4S1VL-101-m01	Virology 1											
	ECTS	5	Duratio	1 semester	Method of grading numerical grade	Modul level	undergraduate					
	Course	!S		<ul><li>03-4S1VL-1-101:</li><li>03-4S1VL-2-101:</li></ul>	s 3 module components. Information on courses V (no information on SWS (weekly contact hour s S (no information on SWS (weekly contact hour s P (no information on SWS (weekly contact hour	rs) and course languag rs) and course languag	e available) e available)					
	Metho	d of ass	essment	Assessment in this mo	odule comprises the assessments in the individu	ual module component	s as specified below. Unless					
	Assessment in module component o3-4S1VL-1-101: General Virology  1 ECTS, Method of grading: numerical grade written examination (approx. 20 minutes) Language of assessment: German or English Assessment in module component o3-4S1VL-2-101: General Virology - Seminar  1 ECTS, Method of grading: (not) successfully completed presentation (approx. 20 to 30 minutes) Language of assessment: German or English Assessment in module component o3-4S1VL-3-101: Practical Course Virology  3 ECTS, Method of grading: numerical grade written examination (approx. 20 minutes) or oral examination (approx. 20 minutes) Language of assessment: German or English Only after successful completion of module components: Successful completion of module component o3-4S1VL-2 is a prerequisite for participation in module component o3-4S1VL-3. Other prerequisites: Admission prerequisite to assessment: regular attendance of lab course as specingining of the course.											
	othern	rerequi	sites	By way of exception, additional prerequisites are listed in the section on assessments.								
	Partici <sub>j</sub> cation	pants ar of place	nd allo-	Biologie (Biology) Back chemistry) Bachelor's: according to the follow among applicants with ject semesters of the r located by lot. A waitin (Biology) Bachelor's: Sfollows: Places will pridits. Should the modu Bachelor's degree sub will be allocated to stub Bachelor's degree sub of the application-orie the number of places a licants from the other ces, there will be a unidule component that a have successfully com	helor's: 18 places. Biochemie (Biochemistry) Bac Should the number of applications exceed the raying quotas: Quota 1 (two thirds of places): current the same average grade, places will be allocated espective applicant; among applicants with the ray list will be maintained and places re-allocated thould the number of applications exceed the numerily be allocated to students of the Bachelor's le be used in other subjects, there will be two quiject Biologie (Biology) with 180 ECTS credits and dents of the Bachelor's degree subject Biologie jects Computational Mathematics and Mathematics and Mathematics and Mathematics and Jects Biologie (Biology) (as well as potential as potential by the subject Biologie (Biology) (as module computation for the courses of one module computer concerned will be allocated in a standardisect pleted at least one other module component of the will be maintained and places re-allocated as the	chelor's: 12 places. Se number of available plant average grade of sued by lot. Quota 2 (one same number of subject as they become available places degree subject Biologuotas: 95% of places with 60 ECTS atik (Mathematics), each tially to students of ot plications, the remaining ponent, several course component. In this cased procedure. In this protein the respective module hey become available.	aces, places will be allocated accessfully completed modules; third of places) number of subset semesters, places will be alable. Selection process Biologie ces, places will be allocated as gie (Biology) with 180 ECTS crevill be allocated to students of the num of one participant in total) acredits and to students of the ch with 180 ECTS credits, as part her 'importing' subjects). Should ng places will be allocated to appers with a restricted number of places, places on all courses of a motocedure, applicants who already will be given preferential consi-Selection process group 1 (95%).					
Bachelor's with 1 major B	iochemistr	y (2009)		JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 025 - - H 2009 page 11 / 17 will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken								
				during their studies or (Physics), Mathematik	ng to the number of ECTS credits they have achie of all module components in the subject of Biol (Mathematics)) at the time of application. This v eir average grade weighted according to the num	logie (Biology) (excludi will be done as follows	ng Chemie (Chemistry), Physik :: First, applicants will be ranked,					

03-4S1HG-BC-092-	Human	genetic	s for stud	dents o	of biochemistry								
mo1	ECTS	5	Duration	1	1 semester	M	Nethod of grading   numerical grade	Modul level	undergraduate				
	Courses	5		•	This module comprises 2 module components. Information on courses will be listed separately for each module component.  o3-4S1HG-BC-1HZ-092: V + Ü (no information on SWS (weekly contact hours) and course language available)  o3-4S1HG-BC-2HZ-092: S (no information on SWS (weekly contact hours) and course language available)								
	Method	of asse	essment	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.									
				Asses	Assessment in module component o3-4S1HG-BC-1HZ-092: Human cytogenetics for students of biochemistry Human cytogenetics for students of biochemistry  • 3 ECTS, Method of grading: numerical grade  • 2 written examinations (multiple choice): mid-semester examination (approx. 15 minutes), end-of-semester examination (approx. 20 minutes), weighted 1:1  Assessment in module component o3-4S1HG-BC-2HZ-092: Human cytogenetics for students of biochemistry (Seminar)  • 2 ECTS, Method of grading: (not) successfully completed  • presentation (approx. 20 to 30 minutes)								
	Participants and allo- cation of places			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.									
08-BC-MOLP-092-	Molecul	lar Biol	ogy Lab										
mo1	ECTS	5	Duration	า	1 semester	M	Nethod of grading   numerical grade	Modul level	undergraduate				
	Courses	5		Ü (no information on SWS (weekly contact hours) and course language available)									
	Method	of asse	essment	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									
	Module: complet		essfully	o8-BC (module component o8-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.									

07-4BFMZ4-	Bioinformat	ics for adva	nced S	tudents in Biochem	istry		_					
BC-092-m01	ECTS 5	Duratio		1 semester	Method of grading	=	Modul level	undergraduate				
	Courses		V + Ü	(no information on	SWS (weekly contact	hours) and course langua	ge available)					
	Method of a	ssessment		log (approx. 10 to 20 pages) Assessment offered: once a year, summer semester								
				Language of assessment: German or English								
	other prereq	Juisites	Admi	Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.								
	Participants cation of pla		Bioch appli third place appli	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.								
07-5S2M-	Specific Mic	robiology 2	for St	udents in Biochemis	stry							
Z2-BC-092-m01	ECTS 5	Duratio		1 semester	Method of grading	_	Modul level	undergraduate				
	Courses		•	his module comprises 2 module components. Information on courses will be listed separately for each module component.  o7-5S2MZ2-1MI-BC-092: V + Ü (no information on SWS (weekly contact hours) and course language available)  o7-5S2MZ2-2MI-BC-092: S (no information on SWS (weekly contact hours) and course language available)								
	Method of a		Asse Micro	ssment in module control biology for Students 4 ECTS, Method of a) written examina each (approx. 30 r tation (approx. 20 Language of asses Other prerequisite tion of the respect ssment in module control 1 ECTS, Method of presentation (approx. 20) Assessment offere	omponent o7-5S2MZ2 of in Biochemistry grading: numerical g tion (approx. 60 minu- ninutes) or d) oral ex- to 30 minutes) osment: German or En s: Admission prerequive exercises as spec component o7-5S2MZ2 grading: (not) success fox. 20 to 30 minutes) d: once a year, winter	e module will require succe 2-1MI-BC-092: Molecular Marade utes) or b) log (approx. 10 to a mination in groups of upure of upure of upure of the company of the company of the company of the completed of the complete of	essful completion of Microbiology for Stud o 20 pages) or c) ora to 3 candidates (applar attendance of exeme course. olecular Microbiolog	ts as specified below. Unless all individual assessments.  Idents in Biochemistry Molecular examination of one candidate prox. 60 minutes) or e) presenercises and successful complesy for Students in Biochemistry				
	Participants cation of pla	and allo-	Bioch ber o 1 (two grade amor	nemie (Biochemistry f applications excee o thirds of places): c e, places will be allo ng applicants with th	) Bachelor's: 12 place d the number of avail urrent average grade cated by lot. Quota 2	es. Selection process Bioch lable places, places will be of successfully completed (one third of places) numb abject semesters, places w	nemie (Biochemistry e allocated according I modules; among ap per of subject semes	Bachelor's: Should the numge to the following quotas: Quota oplicants with the same average sters of the respective applicant; ot. A waiting list will be maintained				

08-OC4-101-m01	Organic Chemistry 4										
	ECTS 10 Duration			n	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-OC4-2-101: P (no information on SWS (weekly contact hours) and course language available)  • 08-OC4-1-092: 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.							
	Modules successfully			<ul> <li>Assessment in module component o8-OC4-2-101: Organic Chemistry 4 (Lab Course)</li> <li>5 ECTS, Method of grading: (not) successfully completed</li> <li>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)</li> <li>Assessment in module component o8-OC4-1-092: Organic Chemistry 4 Organic Chemistry 4</li> <li>5 ECTS, Method of grading: numerical grade</li> <li>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)</li> <li>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).</li> <li>08-AC1 (module component o8-AC1-2 only) or o8-AC1-BC (module component o8-AC1-BC-2 only) or o8-AN1 (module component o8-AC1-BC only)</li> </ul>							
	completed other prerequisites			nent o8-AN1-2 only)  By way of exception, additional prerequisites are listed in the section on assessments.							
Thesis (12 ECTS cr	edits)										
08-BA-BC-092-	Bachel	or Thes	is in Bioc	hemisti	y						
mo1	ECTS 12 Duratio		1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses			no courses assigned							
	Method of assessment			written thesis Language of assessment: German or English							
	Additional Information			Additional information on module duration: 10 weeks.							
Subject-specific K	ey Skills										
06-B-P2T-	Philoso	ophy 2									
F2-072-m01	ECTS 5 Duratio			n [	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			writter	written examination (approx. 120 minutes)						

07-2BM-072-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 o	of asses	sment	written examination (approx. 45 minutes) including multiple choice questions								
	other pre	erequisit	es	Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.								
	Participants and allo- cation of places			Only a	Only as part of "spezielles Studienangebot": 30 places.							
07-3A3BI-072-m01	Bioinformatics											
	ECTS 2	2 [	Duration		1 semester	Method of grading	numerical grade	Ì	Modul level	undergraduate		
	Courses			This module comprises 2 module components. Information on courses will be listed separately for each module component.  or-3A3BI-1B-072: V (no information on SWS (weekly contact hours) and course language available)  or-3A3BI-2B-072: S (no information on SWS (weekly contact hours) and course language available)								
	Method o	of asses:		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.								
	Participa			<ul> <li>1 ECTS, Method of grading: numerical grade</li> <li>written examination (approx. 20 minutes)</li> <li>Assessment in module component o7-3A3BI-2B-072: Bioinformatics (Seminar)</li> <li>1 ECTS, Method of grading: (not) successfully completed</li> <li>term paper (approx. 5 to 10 pages)</li> <li>Only as part of Biochemistry Master's: 5 places. Places will be allocated by lot.</li> </ul>								
50 D.C	cation of	<u> </u>		· D:								
03-FOR-BC-092- m01	<u>-</u>				chemistry		1( ) (1)	1				
11101	ECTS 2 Duratio											
	Courses			V + S (no information on SWS (weekly contact hours) and course language available)								
an Dhun ann mar			sment	attendance of 80% of talks								
03-Phys-092-m01	Physiology  ECTS 3 Duratio			1	1 semester	Mothod of grading	numorical grado	1	Modul level	undergraduate		
	ECTS 3 Duratio			1 semester Method of grading numerical grade Modul level undergraduate  V (no information on SWS (weekly contact hours) and course language available)								
				written examination (30 multiple choice questions)								
03-VTK-092-m01												
	Laboratory animal scier ECTS 2 Duratio				1 semester	Method of grading	(not) successfully co	mpleted	Modul level	undergraduate		
	Courses	-   -		1 semester   Method of grading   (not) successfully completed   Modul level   undergraduate   V + P (no information on SWS (weekly contact hours) and course language available)								
				written examination (approx. 60 minutes)								
	other prerequisites			Admission prerequisite to assessment: regular attendance of lab course as specified at the beginning of the course.								
·	1 3 cm 51 Pile				same provide to deserve in the same deserve in the same deserve deserve de the segments of the course.							

08-EP-092-m01	Practical Course - external												
	ECTS 10 Duratio		1 1 50	emester	Method of grading	(not) successfully com	pleted Modul level	undergraduate					
	Courses		P (no information on SWS (weekly contact hours) and course language available)										
	Method of ass	sessment	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										
03-AP-092-m01	Practical Course as Exchange Student												
	ECTS 10	Duratio	1 1 50	emester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses		P (no info	P (no information on SWS (weekly contact hours) and course language available)									
	Method of ass	sessment	a) written examination (approx. 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 (groups of up to 3 candidates, approx. 60 minutes) or e) presentation (approx. 20 to 30 minutes)										
03-TR-072-m01	Toxicology and legal studies												
	ECTS 3	Duratio	1 1 50	emester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	<del>.</del>	V + V (no i	information on	SWS (weekly contac	t hours) and course lang	uage available)						
	Method of ass	sessment	written examination (approx. 90 minutes)										
03-98-PGN-092-	Introductory Neurobiology for students of biomedicine												
mo1	ECTS 5	Duratio	1 1 50	emester	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 ass	sessment	didate 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 prerequ	isites	Admission prerequisite to assessment: regular attendance of courses (lectures excluded) as specified at the beginning of the course.										
41-IK-NW1-101-	Information Li	iteracy for	Students of	Students of the Natural Sciences (Basic Level)									
mo1	ECTS 2	Duratio	1 1 50	emester	Method of grading	(not) successfully com	pleted Modul level	undergraduate					
	Courses		Ü (no information on SWS (weekly contact hours) and course language available)										
	Method of ass	sessment	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 a cation of place		the degree ces, if and each of th	e programmes of when any becomentions above-mentions with the same	of the respective sub ome available, will b oned groups, 30% of	pject-specific focuses wil be allocated to students of places will be allocated	l be given preferential of of the other natural scie according to the numb	llocated as follows: Students of consideration. The remaining plaences degree programmes. In per of subject semesters. Among emaining 70% of places will each					
Bachelor's with 1 major	Biochemistry (2009)					JMU Würzburg • generated	l 26-Aug-2024 • exam. reg. data r	record 82 025 - - H 2009 page 16 / 17					

41-IK-NW2-101-	Information Literacy for Students of the Natural Sciences (Advanced Level)									
mo1	ECTS	2	Duration	ı	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.						
		oants an of place	S	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.						