



Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Computational Mathematics as a Bachelor's with 1 major with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Institute of Mathematics

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 cre- ditable 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 me- thod 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)):

08-Apr-2013 (2013-53)

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	cified in the form X	(y) with course type >	(abbreviated as specified abo	ve and number of we	ekly contact hours y
	Method of as	ssessme	ent					
	Only after su completion of		l if applica	ble				
	Other prereq	uisites	if applica	ble				
	Participants on of places		ocati- if applica	ble				
	Additional in	formati	on if applica	ble				
	Referred to in	n LPO I	if applica	ble (examination re	gulations for teachin	g-degree programmes)		

10-M-ANA-122-	Analysis				
m01	ECTS 20 Durati	on 2 semester	Method of grading numerical grade	Modul level	undergraduate
	Courses	• 10-M-ANA-1-122 • 10-M-ANA-2-122	s 3 module components. Information on courses : V + Ü (no information on SWS (weekly contact h :: V + Ü (no information on SWS (weekly contact l :: M (no information on SWS (weekly contact hou	iours) and course lai nours) and course la	nguage available) nguage available)
	Method of assessmen		dule comprises the assessments in the individu essful completion of the module will require suc		
		 8 ECTS, Method written examina by an oral exam approx. 30 minu as subject of the (Prüfungsteilmo) Language of ass Other prerequis students about a declaration of assessment over dents who meet assessment at a Assessment in module 8 ECTS, Method written examina by an oral exam approx. 30 minu as subject of the (Prüfungsteilmo) Language of ass Other prerequis students about a declaration of assessment over dents who meet assessment over dents who meet assessment over dents who meet assessment at a Assessment in module 4 ECTS, Method oral examinatio modules 10-M-A 	component 10-M-ANA-1-122: Analysis 1 Analysis of grading: (not) successfully completed tion (approx. 90 to 180 minutes); if announced by ination of one candidate each (approx. 20 minu- tates). Module will also be considered successfull e oral examination covering several modules (se dul)) and this examination was passed. Sessment: German, English if agreed upon with the ites: Certain prerequisites must be met to qualify the respective details at the beginning of the co- will to seek admission to assessment. If studer er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual e component 10-M-ANA-2-122: Analysis 2 Analysis of grading: (not) successfully completed tion (approx. 90 to 180 minutes); if announced by ination of one candidate each (approx. 20 minu- tes). Module will also be considered successfull e oral examination covering several modules (se dul)) and this examination was passed. sessment: German, English if agreed upon with the ites: Certain prerequisites must be met to qualify the respective details at the beginning of the co- will to seek admission to assessment. If student er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual er the course of the semester, the lecturer will p t all prerequisites will be admitted to assessme a later date, students will have to obtain the qual er the course of the semester, the lecturer will p t all prerequisites will be admitt	the lecturer, the writutes) or an oral exar ly completed if the n parate module comp he examiner for admission to ass purse. Registration for the have obtained th ut their registration nt in the current or i lification for admissi is 2 the lecturer, the writutes) or an oral exar ly completed if the n parate module comp he examiner for admission to ass purse. Registration for the have obtained th ut their registration for the current or i lification for admissi palysis assessment will ha	nination in groups (groups of 2, nodule component was selected bonent for assessment purposes essment. The lecturer will inform or the course will be considered he qualification for admission to for assessment into effect. Stu- n the subsequent semester. For on to assessment anew. ten examination can be replaced mination in groups (groups of 2, nodule component was selected bonent for assessment purposes essment. The lecturer will inform or the course will be considered he qualification for admission to for assessment into effect. Stu- n the subsequent semester. For on to assessment anew.
Bachelor's with a main	or Computational Mathematics (2013	Only after succe one of the other	essful completion of module components: Succ two module components is a prerequisite for pa JMU Würzburg • generated 2	essful completion of articipation in modul	e component 10-M-ANA-P.
	Totner prerequisites	by way of exception, a	autional prerequisites are tisted in the section of	n assessments.	

10-M-LNA-122-m01 Linear Algeb					
ECTS 20	Duration		Method of grading numerical grade	Modul level	undergraduate
Courses		 10-M-LNA-1-122: 10-M-LNA-2-122: 10-M-LNA-P-122: 	s 3 module components. Information on courses v V + Ü (no information on SWS (weekly contact ho : V + Ü (no information on SWS (weekly contact ho : M (no information on SWS (weekly contact hours	ours) and course lang ours) and course lang s) and course langua	guage available) guage available) ge available)
Method of as	ssessment		dule comprises the assessments in the individua essful completion of the module will require succ		
		 8 ECTS, Method written examination by an oral examination as subject of the (Prüfungsteilmo) Language of ass Other prerequisi students about a declaration of assessment over dents who meet assessment at a Assessment in module 8 ECTS, Method written examination of assubject of the (Prüfungsteilmo) Language of ass Other prerequisi students about a declaration of assessment at a Assessment in module 8 ECTS, Method written examination of assubject of the (Prüfungsteilmo) Language of ass Other prerequisi students about a declaration of assessment over dents who meet assessment at a Assessment in module 4 ECTS, Method oral examination modules 10-M-L Language of ass Only after succe 	component 10-M-LNA-1-122: Linear Algebra 1 Line of grading: (not) successfully completed tion (approx. 90 to 180 minutes); if announced by mination of one candidate each (approx. 20 minu- utes). Module will also be considered successfully e oral examination covering several modules (sep dul)) and this examination was passed. Sessment: German, English if agreed upon with the ites: Certain prerequisites must be met to qualify f the respective details at the beginning of the cor- will to seek admission to assessment. If studen er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali component 10-M-LNA-2-122: Linear Algebra 2 Line of grading: (not) successfully completed tion (approx. 90 to 180 minutes); if announced by mination of one candidate each (approx. 20 minu- utes). Module will also be considered successfully e oral examination covering several modules (sep dul)) and this examination was passed. Sessment: German, English if agreed upon with the ites: Certain prerequisites must be met to qualify f the respective details at the beginning of the con- will to seek admission to assessment. If studen er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali er the course of the semester, the lecturer will put t all prerequisites will be admitted to assessment a later date, students will have to obtain the quali er the course of the semester, the lectu	the lecturer, the writter tes) or an oral exami- y completed if the mo- arate module compo- e examiner or admission to asser- urse. Registration for ts have obtained the it their registration for t in the current or in fication for admission near Algebra 2 the lecturer, the writter tes) or an oral exami- y completed if the mo- arate module compo- e examiner or admission to asser- urse. Registration for t their registration for a admission to asser- urse. Registration for t their registration for t their registration for t their registration for t their registration for t their registratic t their registration for	ination in groups (groups of 2, obule component was selected onent for assessment purposes assment. The lecturer will inform the course will be considered e qualification for admission to or assessment into effect. Stu- the subsequent semester. For n to assessment anew. en examination can be replaced ination in groups (groups of 2, obule component was selected onent for assessment purposes assment. The lecturer will inform the course will be considered e qualification for admission to or assessment into effect. Stu- the subsequent semester. For n to assessment anew. assessment into effect. Stu- the subsequent semester. For n to assessment anew. assessment anew.
other prereq	uisites		dditional prerequisites are listed in the section or		•
Bachelor's with 1 major Computational Math		by way of exception, at	IMU Würzburg • generated 26		record 82 f24 - - H 2013 page 4 / 43

10-M-VAN-122-	Advand	ced Ana	lysis						
m01	ECTS	9	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Course	es		V + Ü	(no information on	SWS (weekly contact	hours) and course language av	ailable)	
	Methoo	d of ass		if ann 20 mi	ounced by the lecturnutes) or an oral ex	amination in groups			n of one candidate each (approx.
		orerequi		tive d on to the le sessn ficatio	etails at the beginn assessment. If stuc cturer will put their nent in the current o on for admission to	ing of the course. Reg lents have obtained t registration for asses	sistration for the course will be on the qualification for admission to sment into effect. Students who	considered a de o assessment o o meet all prere	form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-
10-M-MWR-122- m01		<u> </u>	Computa		1				
	ECTS	10	Duration		1 semester	Method of grading	=	Modul level	undergraduate
	Course	-			-		hours) and course language av	ailable)	
	Metho	d of ass		if ann 20 mi	ounced by the lecturnutes) or an oral ex	amination in groups			n of one candidate each (approx.
	other p	orerequi	sites	tive d on to the le sessn	etails at the beginn assessment. If stuc cturer will put their	ing of the course. Reg lents have obtained t registration for asses or in the subsequent s	sistration for the course will be on the qualification for admission to sment into effect. Students who	considered a de o assessment o o meet all prere	form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-

10-M-NUM-122-	Numer	ical Ma	athematics				
m01	ECTS	20	Duration	2 semester	Method of grading numerical grade	Modul level	undergraduate
	Course			 10-M-NUM-1-122 10-M-NUM-2-122 10-M-NUM-P-122 	3 module components. Information on court V + Ü (no information on SWS (weekly cont V + Ü (no information on SWS (weekly cont M (no information on SWS (weekly contact)	tact hours) and course lan tact hours) and course lar t hours) and course langu	guage available) nguage available) age available)
	Metho	d of ass	sessment		dule comprises the assessments in the indiverse ressful completion of the module will require		
				 8 ECTS, Method 4 written examinat by an oral exami approx. 30 minut as subject of the (Prüfungsteilmood Language of asse Other prerequisit students about t a declaration of assessment over dents who meet assessment at a Assessment in module 8 ECTS, Method 4 written examinat by an oral exami approx. 30 minut as subject of the (Prüfungsteilmood Language of asse Other prerequisit students about t a declaration of assessment over dents who meet assessment over dents who meet assessment at a Assessment in module 4 ECTS, Method 4 oral examinatior modules 10-M-N 	component 10-M-NUM-1-122: Numerical Mator for a grading: (not) successfully completed ion (approx. 90 to 180 minutes); if announce ination of one candidate each (approx. 20 tes). Module will also be considered success oral examination covering several modules dul)) and this examination was passed. essment: German, English if agreed upon wittees: Certain prerequisites must be met to quark he respective details at the beginning of the will to seek admission to assessment. If sturt the course of the semester, the lecturer we all prerequisites will be admitted to assesse later date, students will have to obtain the component 10-M-NUM-2-122: Numerical Mator for grading: (not) successfully completed ion (approx. 90 to 180 minutes); if announce in ation of one candidate each (approx. 20 tes). Module will also be considered success oral examination covering several modules dul) and this examination was passed. essment: German, English if agreed upon wittees: Certain prerequisites must be met to quark the respective details at the beginning of the will to seek admission to assessment. If sturt the course of the semester, the lecturer we all prerequisites will be admitted to assessed at the beginning of the will to seek admission to assessment. If sturt the course of the semester, the lecturer we all prerequisites will be admitted to assessed at the beginning of the will to seek admission to assessment. If sturt the course of the semester, the lecturer we all prerequisites will be admitted to assessed at the beginning of the will to seek admission to assessment. If sturt the course of the semester, the lecturer we all prerequisites will be admitted to assessed at the date, students will have to obtain the component 10-M-NUM-P-122: Examination of grading: numerical grade in of one candidate each (approx. 30 minute UM-1 and 10-M-NUM-2 essment: German, English if agreed upon with the date is the to the mator of the semester is a the preceduate to the semester is a the preceduate to the semester is a the preceduate to the	ed by the lecturer, the writter minutes) or an oral exami- sofully completed if the mo- sofully completed if the mo- sofully completed if the mo- sofull provide admission to assess the course. Registration for udents have obtained the vill put their registration for sment in the current or in qualification for admissio athematics 2 Numerical M ed by the lecturer, the writter minutes) or an oral exami- sofully completed if the mo- sofully completed if the mo- sofully for admission to assess the course. Registration for udents have obtained the vill put their registration for udents have obtained the vill put their registration for udents have obtained the vill put their registration for sment in the current or in qualification for admissio in Numerical Mathematics tes); assessment will hav	en examination can be replaced ination in groups (groups of 2, odule component was selected onent for assessment purposes ssment. The lecturer will inform the course will be considered qualification for admission to or assessment into effect. Stu- the subsequent semester. For n to assessment anew. lathematics 2 en examination can be replaced ination in groups (groups of 2, odule component was selected onent for assessment purposes ssment. The lecturer will inform the course will be considered equalification for admission to or assessment into effect. Stu- the subsequent semester. For n to assessment into effect. Stu- the subsequent semester. For n to assessment anew.
					ssful completion of module components: S two module components is a prerequisite fo		
	•	prerequ		By way of exception, ad	ditional prerequisites are listed in the secti		
Bachelor's with 1 major	Computatio	nal Mathe	matics (2013)		· · · · ·		record 82 f24 - - H 2013 page 6 / 43

10-M-VTC-122-m01	Advanc	ed Com	putationa	l Math	ematics				
	ECTS	20	Duration		2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Course	S		•	10-M-STO-1-122, 10 guage and number	-M-DGL-1-122, 10-M- of weekly contact ho		nd 10-M-FAN-1-12	2: V + Ü (no information on lan-
	Methoo	d of ass					components. To pass this mod below and the assessment co		
				wöhnl Funkti metric Analys • • • • • • • • • • • • • • • • •	iche Differentialglei ionentheorie (Introd Analysis), and in m sis) : 8 ECTS credits, pas written examinatio ced by an oral exar dates (approx. 30 f as subject of the or (Prüfungsteilmodu Language of asses Additional prerequ turer will inform stu be considered a de admission to asses effect. Students wh ster. For assessment sment in module co omputational Mather 4 ECTS credits, nur oral examination o in the two module Language of asses Only after successi	ichungen (Ordinary D iuction to Complex An iodule component 10 is / fail n (approx. 90 to 180 mination of one cand minutes). The modul ral examination cove l)) and this examinat sment: German; Engl isites: To qualify for udents about the res claration of will to se sector the cour no meet all prerequis nt at a later date, stu- mponent 10-M-VTC-I ematics) nerical grading f one candidate each components selected sment: German; Engl ful completion of mo	offerential Equations), in mod nalysis), in module componen o-M-FAN-1-122: Einführung in o lidate each (approx. 20 minut e component will also be con ring several modules (separat ion is passed. lish if agreed upon with exami admission to assessment, stu pective details at the beginnin eek admission to assessment se of the semester, the lectur ites will be admitted to assess dents will have to obtain the o P-122: Prüfung in Vertiefung C n (approx. 30 minutes). Asses d by students. lish if agreed upon with exami	ule component 10 It 10-M-GAN-1-12 die Funktionaland e lecturer, the write es) or an oral exa sidered successive module component inter(s) idents must meet ner(s) idents must meet ner(s) inter the curred publication for a omputational Material sment will have to ner(s) mponent 10-M-V	component 10-M-DGL-1-122: Ge- o-M-FTH-1-122: Einführung in die 2: Geometrische Analysis (Geo- alysis (Introduction to Functional tten examination may be repla- amination in groups of 2 candi- fully completed if it is selected onent for assessment purposes t certain prerequisites. The lec- Registration for the course will e obtained the qualification for egistration for assessment into ent or in the subsequent seme- dmission to assessment anew. athematics (Assessment in Advan- reference to the topics covered
	other p	rerequi	sites	By wa			are listed in the section on as		
				<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	module duration: 1			

Computational Mathematics 10-M-MKG-122 Mathematics in Culture and Society	Compulsory Electi	ves (50 ECTS cree	dits)	
mo1 ECTS 8 Duration 2 semester Method of grading (not) successfully completed Modul level undergraduate Courses This module has 4 components, information on courses listed separately for each component. 10-M-R65-1122, and 10-M-SCH-1122; V U (no information on language and number of weekly contact hours available) Method of assessment This module has the following 4 assessment components. To pass the module as a whole students must pass two of the four assessment components. Assessment in module component to-M-GE5-1-122; Ausgewählte Kapitel aus der Geschichte der Mathematik (Selected Topics from the History of Mathematics), in module component to-M-MSC-1-122; Mathematisches Schreiben (Mathematical Writing), and in module component to-M-GE5-1-122; Hulmathematik vom höheren Standpunkt (School Mathematics from a Higher Perspective) : • 4 ECTS credits, pass / fail • project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) • Assessment will be offered in the semester in which the course is offered and in the subsequent semester. • Language of assessment: German, English if agreed upon with examiner(s) • Additional prerequisites: To qualify for admission to assessment, if students have obtained the qualification for admission to assessment or Will to seek admission to assessment in the current or in the subsequent semester. • Language of assessment at a later date, students will have to obtain the qualification for admission to assessment at alater date. Students will be admitted to assessment in the curent	Computational Ma	thematics		
Courses This module has 4 components; information on courses listed separately for each component. • 10-M-GES-1122, 10-M-MSC-1122, and 10-M-SCH-1122; V ± Ü (no information on language and number of weekly contact hours available) • 10-M-REO-1122; S (no information on language and number of weekly contact hours available) • 10-M-REO-1122; S (no information on language and number of weekly contact hours available) • 10-M-REO-1122; S (no information on language and number of weekly contact hours available) Method of assessment This module has the following 4 assessment components. To pass the module as a whole students must pass two of the four assessment components. Assessment in module component 10-M-GES-1122; Auggewählte Kapitel aus der Geschichte der Mathematical Writing), and in module component 10-M-SCH-1122; Mathematiks (School Mathematica from a Higher Perspective): • a ECTS credits, pass / fail • project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) • Assessment will be offered in the semester in which the course is offered and in the subsequent semester. • Language of assessment course of the semester, the lecturer will put their registration for the course will hor or assessment into the curse of the semester, the lecturer will put the registration for the course will be considered a declaration of will to seek admission to assessment, if students have obtained the qualification for admission to assessment in the subsequent semester. • Language of assessestent over the curse of the semester will put	10-M-MKG-122-	Mathematics in	n Culture	and Society
 10-M-GE5-i122, io-M-MSC1-122, and 10-M-SCH-122: V + Ü (no information on language and number of weekly contact hours available) 10-M-PRO-1-122: S (no information on language and number of weekly contact hours available) Method of assessment This module has the following 4 assessment components. To pass the module as a whole students must pass two of the four assessment in module component 10-M-GE5-1-122: Ausgewählte Kapitel aus der Geschichte der Mathematical Writing), and in module component 10-M-GE5-1-122: Ausgewählte Kapitel aus der Geschichte der Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-SCH-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-SCH-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-ROS-1-122: Schulmathematik vom höheren Standpunkt (School Mathematical Writing), and in module component 10-M-GE5-1-122: Nature voltamet(School Mathematics) 4 ECTS credits, pass / fail project assignment (organic figured upon with examiner(S) 4 ECTS credits, pass / fail segred upon with examiner(S) 4 ECTS credits, pass / fail talk (approx. 6o to 180 minutes) Assessessment in module component 10-M-PRO-1-122: Proseminar Mathe	m01	ECTS 8	Duratio	n 2 semester Method of grading (not) successfully completed Modul level undergraduate
 assessment components. Assessment in module component 10-M-GES-1-122: Ausgewählte Kapitel aus der Geschichte der Mathematik (Selected Topics from the History of Mathematics), in module component 10-M-MSC-1-122: Mathematisches Schreiben (Mathematical Writing), and in module component 10-M-SCH-1-122: Schulmathematik on höheren Standpunkt (School Mathematics from a Higher Perspective): 4 ECTS credits, pass / fail project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment: German; English if agreed upon with examiner(s) Additional prerequisites: To qualify for admission to assessment, students must meet certain prerequisites. The lecturer will inform students about the respective details at the beginning of the course. Registration for the subsequent semester. Language of assessment a later date, students will bave to obtain the qualification for admission to assessment and/Lecomponent 10-M-PRO-1122: Proseminar Mathematics) 4 ECTS credits, pass / fail talk (approx. 6o to 180 minutes) Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment: Semant; English if agreed upon with examiner(s) Additional prerequisites: To qualify for admission to assessment in the current or in the subsequent semester. Language of assessment: Semant; English if agreed upon with examiner(s) Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment: Semant; English if agreed upon with examiner(s)<				 10-M-GES-1-122, 10-M-MSC-1-122, and 10-M-SCH-1-122: V + Ü (no information on language and number of weekly contact hours available) 10-M-PRO-1-122: S (no information on language and number of weekly contact hours available)
other prerequisites By way of exception, additional prerequisites are listed in the section on assessments.		Method of asse	essment	 assessment components. Assessment in module component 10-M-GES-1-122: Ausgewählte Kapitel aus der Geschichte der Mathematik (Selected Topics from the History of Mathematics), in module component 10-M-MSC-1-122: Mathematisches Schreiben (Mathematical Writing), and in module component 10-M-SCH-1-122: Schulmathematik vom höheren Standpunkt (School Mathematics from a Higher Perspective) : 4 ECTS credits, pass / fail project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment: German; English if agreed upon with examiner(s) Additional prerequisites: To qualify for admission to assessment, students must meet certain prerequisites. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew. Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment at a later date, students will have to obtain the qualification for admission to assessment anew. Assessment in module component 10-M-PRO-1-122: Proseminar Mathematik (Proseminar Mathematics) 4 ECTS credits, pass / fail talk (approx. 60 to 180 minutes) Assessment will be offered in the semester in which the course is offered and in the subsequent semester. Language of assessment: German; English if agreed upon with examiner(s) Additional prerequisites: To qualify for admission to assessment, students must meet certain pr
		other prerequis	sites	
			-	

10-M-SE2-122-m01	Additio	nal Sem	inar in M	lathem	atics	,		18	
	ECTS	5	Duration	1 I	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Course	S		S (no	nformation on SWS	(weekly contact hou	rs) and course language availa	ble)	
	Methoo	d of asse	essment		pprox. 60 to 180 mi age of assessment:		greed upon with the examiner		
	other p	rerequis		tive de on to a the lee sessm	etails at the beginnin assessment. If stude cturer will put their r	ng of the course. Reg ents have obtained th registration for assess r in the subsequent s	istration for the course will be ne qualification for admission t sment into effect. Students wh	considered a de to assessment o o meet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-

ECTS 10	Duration		Method of grading numerical grade	Modul level	undergraduate
Courses Method of	assessment	 10-M-STO-1-12: 10-M-DIM-1-12: language and r 10-M-ERC-P-12: 	omponents; information on courses listed se 2, 10-M-ALG-1-12, 10-M-DGE-1-122, 10-M-DGL- 2, 10-M-FAN-1-122, 10-M-ORS-1-122, 10-M-ZTI number of weekly contact hours available) 2: M (no information on language and number following 13 assessment components. To pas	1-122, 10-M-FTH-1-122, 10 H-1-122, and 10-M-MMP-2 r of weekly contact hours	-M-GAN-1-122, 10-M-PGE-1-122, -122: V + Ü (no information on available)
		 sessment component Assessment in modul führung in die Algebra trie (Introduction to D dinary Differential Equ Complex Analysis), in nent 10-M-PGE-1-122: 10-M-DIM-1-122: Einführung Operations Research, ry), and in module con Physics 2): 8 ECTS credits, written examin ced by an oral dates (approx. as subject of th (Prüfungsteilm) Language of as Additional pren turer will inforr be considered admission to a effect. Student ster. For assess Assessment in modul ted Topics from Comp 2 ECTS credits, oral examination in the module of the module of the module of t	ts that are first in the list below and the asses le component 10-M-STO-1-122: Stochastik 1 (a (Introduction to Algebra) in module component Differential Geometry), in module component : uations), in module component 10-M-FTH-1-1 n module component 10-M-GAN-1-122: Geometrie : Einführung in die Projektive Geometrie (Intro ührung in die Diskrete Mathematik (Introduct g in die Funktionalanalysis (Introduction to Fu , in module component 10-M-ZTH-1-122: Einfü mponent 10-M-MMP-2-122: Mathematik in de , pass / fail nation (approx. 90 to 180 minutes). If announde examination of one candidate each (approx. . 30 minutes). The module component will all he oral examination covering several modules sessment: German; English if agreed upon w requisites: To qualify for admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the a declaration of will to seek admission to assess m students about the respective details at the adeclaration of will to seek admission to assess m students about the respective details at the admitted sment at a later date, students will have to ob le component 10-M-ERC-P-122: Prüfung in Erg putational Mathematics) , numerical grading on of one candidate each (approx. 30 minuted component selected by students.	sment component that is Stochastics 1), in module ent 10-M-DGE-1-122: Einfü 10-M-DGL-1-122: Gewöhnl 22: Einführung in die Funk oduction to Projective Geo ion to Discrete Mathemati inctional Analysis), in mod thrung in die Zahlentheori er Mathematischen Physik red by the lecturer, the wri 20 minutes) or an oral exis so be considered success is (separate module compo- ith examiner(s) ment, students must mee e beginning of the course. sessment. If students hav the lecturer will put their r to assessment in the curr tain the qualification for a jänzung Computational M s). Assessment will have	last in the list below. component 10-M-ALG-1-122: Ein- Tahrung in die Differentialgeome- iche Differentialgleichungen (Or- ttionentheorie (Introduction to ric Analysis), in module compo- metry), in module component cs), in module component 10-M- dule component 10-M-ORS-1-122: e (Introduction to Number Theo- t 2 (Mathematics in Mathematical tten examination may be repla- amination in groups of 2 candi- fully completed if it is selected onent for assessment purposes t certain prerequisites. The lec- Registration for the course will e obtained the qualification for egistration to assessment into ent or in the subsequent seme- dmission to assessment anew. athematics (Assessment in Selec-
		 Only after succ 	ssessment: German; English if agreed upon w cessful completion of module components: A seed the written examination in one of the oth	Nodule component 10-M-E	
other prere	auisites	By way of exception	additional prerequisites are listed in the sect	on on assessments	

Bachelor's with 1 major Computational Mathematics (2013) JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82|f24|-|-|H|2013 page 10 / 43

Application-oriented Subject Students must take one of the application-oriented subjects (Biologie (Biology), Chemie (Chemistry), Informatik (Computer Science) and Physik (Physics)) with the speci-fied mandatory courses and/or mandatory electives.

Application-oriented Subject Biology

Application oriented Subject Pielery Compulse

Application-orient	ed Subject Biology Comp	ulsory Electives 1
07-2A2GN-	Genetics, Neurobiology	/, Behaviour
V-072-m01	ECTS 6 Duratio	n 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. o7-2A2GNV-1G-072: V + Ü (no information on SWS (weekly contact hours) and course language available) o7-2A2GNV-2N-072: V + Ü (no information on SWS (weekly contact hours) and course language available) o7-2A2GNV-3V-072: V + Ü (no information on SWS (weekly contact hours) and course language available) o7-2A2GNV-3V-072: 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 o7-2A2GNV-1G-072: Basic Genetics Basic Genetics • 2 ECTS, Method of grading: numerical grade
		 written examination (approx. 30 minutes) Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course. Assessment in module component o7-2A2GNV-2N-072: Basic Neurobiology Basic Neurobiology 2 ECTS, Method of grading: numerical grade written examination (approx. 30 minutes) Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course. Assessment in module component o7-2A2GNV-3V-072: Behavioural Biology Behavioural Biology 2 ECTS, Method of grading: numerical grade written examination (approx. 30 minutes) Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course. Assessment in module component o7-2A2GNV-3V-072: Behavioural Biology Behavioural Biology 2 ECTS, Method of grading: numerical grade written examination (approx. 30 minutes, word problems and/or multiple choice questions) Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.
	other prerequisites	By way of exception, additional prerequisites are listed in the section on assessments.
	Participants and allo- cation of places	Only as part of "spezielles Studienangebot": 10 places.
07-2BM-072-m01	Mathematical Biology a	and Biostatistics
	ECTS 4 Duratio	
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)
	Method of assessment	written examination (approx. 45 minutes) including multiple choice questions
	other prerequisites	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 as part of "spezielles Studienangebot": 30 places.

|--|

07-2A2TP-NF-082-	Basic F	Physiol	ogy of Ani	mals f	or minor field of	study							
m01	ECTS	3	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	es		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Metho	d of ass	essment	writte	written examination (approx. 60 minutes, word problems and/or multiple choice questions)								
	other p	orerequi	isites	Adm as sp	dmission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercise is specified at the beginning of the course.								
07-2A2PPR-	Basic Physiology of Prokaryotes for minor field of study												
NF-082-m01	ECTS	3	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			V + Ü	(no information	on SWS (weekly contac	t hours) and course lang	guage available)					
	Metho	d of ass	essment	writte	en examination (approx. 60 minutes) inc	luding multiple choice of	questions					
07-2A2PPF-	Basic F	Physiol	ogy of Pla	nts fo	r minor field of st	tudy							
NF-082-m01	ECTS	3	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	es		V + Ü	(no information	on SWS (weekly contac	t hours) and course lang	guage available)	÷				
	Metho	d of ass	essment	writte	en examination (approx. 45 minutes)							
	other p	orerequi	isites		Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.								
07-3A30E-102-	Plant and Animal Ecology												
m01	ECTS 6 Duratio			n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	25		•	 This module comprises 2 module components. Information on courses will be listed separately for each module component. o7-3A3OE-1-102: V + Ü (no information on SWS (weekly contact hours) and course language available) o7-3A3OE-2-102: V + Ü (no information on SWS (weekly contact hours) and course language available) 								
	Metho	d of ass	sessment	Asse	ssment in this m	odule comprises the as	sessments in the individ	dual module componen	ts as specified below. Unless f all individual assessments.				
				• • Asse	3 ECTS, Methor written examin Other prerequi tion of the resp ssment in modul 3 ECTS, Methor written examin Other prerequi	bective exercises as spe le component o7-3A3OE d of grading: numerical ation (approx. 45 minut	grade es) uisite to assessment: re cified at the beginning of - 2-102: Plant Ecology Pl grade es) uisite to assessment: re	egular attendance of ex of the course. lant Ecology egular attendance of exe	ercises and successful comple- ercises and successful comple-				
	other p	orerequ	isites			additional prerequisites							
		pants a of place		Only	as part of pool o	f general key skills (ASC)): 15 places. Places will	be allocated by lot.					

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 12 / 43
--	---	--------------

07-3A3GM-	Genes	, Molec	ules, Tech	nologies							
T-102-m01	ECTS	6	Duratio	n 1 semester	Method of grading numerical grad	e Modul level	undergraduate				
	Course	25		• 07-3A3GMT-1-1	 This module has 4 components; information on courses listed separately for each component. o7-3A3GMT-1-102, o7-3A3GMT-2-102, o7-3A3GMT-3-102, and o7-3A3GMT-4-102: V (no information on language and number of weekly contact hours available) 						
	Method of assessment				following 4 assessment components. Unl ts to pass the module as a whole.	ess stated otherwise, studer	nts must pass all of these as-				
				matik (Bioinformatics 07-3A3GMT-4-102: Pr • 1.5 ECTS credit	 Assessment in module component o7-3A3GMT-1-102: Genetik (Genetics), in module component o7-3A3GMT-2-102: Bioinfornatik (Bioinformatics), in module component o7-3A3GMT-3-102: Biotechnologie (Biotechnology), and in module component o7-3A3GMT-4-102: Pharmakokinetik (Pharmacokinetics) : 1.5 ECTS credits, numerical grading written examination (approx. 30 minutes, including multiple choice questions) 						
07-1A1ZO-NF-102-		ells to	Organism	s for minor field of stu	dy						
m01	ECTS	10	Duratio		Method of grading numerical grad						
	Courses			 o7-1A1ZO-3P-o contact hours o7-1A1ZO-NF-1 	 his module has 4 components; information on courses listed separately for each component. o7-1A1ZO-3P-072, o7-1A1ZO-4T-072, and o7-1A1ZO-2E-102: V + Ü (no information on language and number of weekly contact hours available) o7-1A1ZO-NF-1Z-082: V (no information on language and number of weekly contact hours available) 						
				 This module has the following 4 assessment components. Unless stated otherwise, students must pass all of these assessment components to pass the module as a whole. Assessment in module component o7-1A1ZO-3P-072: Das Pflanzenreich (The Plant Kingdom) 4 ECTS credits, numerical grading written examination (approx. 60 minutes) Additional prerequisites: admission prerequisite to assessment: regular attendance of exercises as well as successful completion of the respective exercises. Assessment in module component o7-1A1ZO-4T-072: Das Tierreich (The Animal Kingdom) 4 ECTS credits, numerical grading written examination (approx. 60 minutes) Additional prerequisites: admission prerequisite to assessment: regular attendance of and participation in exercises as well as successful completion of the respective exercises as specified at the beginning of the course. Assessment in module component o7-1A1ZO-NF-1Z-082: Die Zelle für das Nebenfach Biologie (The Cell for Biology Minors) 1 ECTS credit, numerical grading written examination (approx. 60 minutes) including multiple choice questions Assessment in module component o7-1A1ZO-2E-102: Evolution 1 ECTS credit, numerical grading written examination (approx. 30 minutes, including multiple choice questions) 							
	other r	orerequ	isites		respective exercises as specified at the be additional prerequisites are listed in the	<u> </u>					

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 13 / 43

07-3A3EBI-	Develo	pmental	Biology	of Anir	of Animals						
OT-102-m01	ECTS	4	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method	d of asse	ssment	writte	written examination (approx. 30 to 60 minutes) including multiple choice questions						
	other p	rerequis	ites		Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.						
07-3A3E-	Developmental Biology of Plants for minor field of study										
BIOP-102-m01	ECTS 4 Duratio		Duration	n 1 semester		Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment			written examination (approx. 30 to 60 minutes) including multiple choice questions							
	other p	rerequis	ites	Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.							

Application-oriented Subject Biology Compulsory Electives 2 When taking up their studies, students are highly recommended to consult with the course advisory service Biology that will help them choose appropriate modules from the list below. Modules from the areas "Spezielle Biowissenschaften I / II" ("Specific Biosciences I / II") may only be used by students who achieved no less than 32 ECTS credits in the area of mandatory electives 1 beforehand.

07-4S1N-	Functional	Morphology	of arth	ropods						
V03-092-m01	ECTS 5	Duratio		1 semester	Method of grading		Modul level	undergraduate		
	Courses		V + Ü	' + Ü (no information on SWS (weekly contact hours) and course language available)						
		assessment		term paper (approx. 5 to 10 pages)						
	other prerec	quisites		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		follow dits. S Bache will b Bache of the ber of from f re will ponen cessf waitin prima ked a studie the sa (5%): achie achie achie achie	vs: Places will prima Should the module be elor's degree subject e allocated to stude elor's degree subject application-oriente places available in the other quota. Sho l be a uniform regula at that are concerne- ully completed at lea rily be allocated acco ccording to the num es or of all module c atik (Mathematics)) o their average grad ir total number of Ed as the sum of these ame ranking, places Places will be allocated yed in modules/mov ved, places will be allocated g applicants with the by lot. Should the	rily be allocated to st be used in other subjut Biologie (Biology) we nts of the Bachelor's ts Computational Ma d subject Biology (as one quota exceed the build there be, within the ation for the courses d will be allocated in ast one other module ined and places re-a cording to the application ber of ECTS credits the omponents in the sub at the time of application two rankings, and pl will be allocated according two rankings, and pl will be allocated according to the dule components of the fullocated by lot. Quot e same number of sub-	applications exceed the number of available places, places will be all students of the Bachelor's degree subject Biologie (Biology) with 180 E ojects, there will be two quotas: 95% of places will be allocated to stude with 180 ECTS credits and 5% of places (a minimum of one participant s degree subject Biologie (Biology) with 60 ECTS credits and to studen athematics and Mathematik (Mathematics), each with 180 ECTS credit is well as potentially to students of other 'importing' subjects). Should he number of applications, the remaining places will be allocated to a one module component, several courses with a restricted number of of one module component. In this case, places on all courses of a mo n a standardised procedure. In this procedure, applicants who already the component of the respective module will be given preferential consi allocated as they become available. Selection process group 1 (95%): cants' previous academic achievements. For this purpose, applicants w they have achieved and their average grade of all assessments taken ubject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Ph cation. This will be done as follows: First, applicants will be ranked, first ng to the number of ECTS credits (qualitative ranking) and, secondly, a d (quantitative ranking). The applicants' position in a third ranking will baces will be allocated according to this third ranking. Among applica cording to the qualitative ranking or otherwise by lot. Selection process e following quotas: Quota 1 (50% of places): total number of ECTS credit the Faculty of Biology; among applicants with the same number of ECT the Faculty of Biology; among applicants with the same number of ECT the Faculty of Biology; among applicants with the same number of ECT the Faculty of Biology; among applicants with the same number of ECT the Faculty of Biology; among applicants with the same number of ECT the Faculty of Biology; among applicants with the same number of ECT the Bachelor's degree subject Biologie (Biology) with 180 ECTS c				
07-3A3B- C-102-m01		of Biochemis					1			
	ECTS 4	Duratio		1 semester	Method of grading		Modul level	undergraduate		
	Courses Mothod of a					hours) and course language a	-			
		assessment) including multiple choice q		alation of the respective eversions		
	other prerec	quisites		ecified at the beginr		allenuance of exercises and		oletion of the respective exercises		
Bachelor's with 1 major (Computational Mat	thematics (2013)				JMU Würzburg • generated 26-Aug	2024 • exam. reg. data	record 82 f24 - - H 2013 page 15 / 43		

07-4A4FL-102-m01	The F	lora of Ge	ermany				
	ECTS	7	Duration	1 semester	Method of grading numerical grade	Modul level	undergraduate
	Cours			 07-4A4FL-1-102: V 07-4A4FL-2-102: E 	2 module components. Information on courses + Ü (no information on SWS (weekly contact l (no information on SWS (weekly contact hou)	hours) and course lange rs) and course language	uage available) e available)
	Meth	od of ass	essment	stated otherwise, succes	ule comprises the assessments in the individu ssful completion of the module will require suc	ccessful completion of	all individual assessments.
				 4 ECTS, Method o written examination 	omponent 07-4A4FL-1-102: Introduction to the f grading: numerical grade on (approx. 45 minutes) and practical identific		
				 Other prerequisite 	ed: once a year, summer semester es: Admission prerequisite to assessment: reg tive exercises (particular emphasis to be plac ourse		
				Assessment in module c 3 ECTS, Method o log (approx. 1 to 2	omponent 07-4A4FL-2-102: Field Excursions of grading: (not) successfully completed pages per field trip)	on the Flora of Germany	
			-:+		ed: once a year, summer semester		
		r prerequi cipants ar	_	, , , ,	litional prerequisites are listed in the section Should the number of applications exceed the		aces places will be allocated as
		n of place		follows: Places will prima dits. Should the module Bachelor's degree subjet will be allocated to stude Bachelor's degree subjet of the application-orient ber of places available in from the other quota. Sh re will be a uniform regul ponent that are concerned cessfully completed at le waiting list will be maint primarily be allocated ac ked according to the nur studies or of all module thematik (Mathematics)) ding to their average gra to their total number of E lated as the sum of these the same ranking, places (5%): Places will be allocated achieved in modules/mod achieved, places will be	arily be allocated to students of the Bachelor's be used in other subjects, there will be two q ct Biologie (Biology) with 180 ECTS credits and ents of the Bachelor's degree subject Biologie cts Computational Mathematics and Mathemated subject Biology (as well as potentially to st n one quota exceed the number of application ould there be, within one module component lation for the courses of one module component ed will be allocated in a standardised procedu east one other module component of the respo- ained and places re-allocated as they become coording to the application. This will be done a de weighted according to the number of ECTS ECTS credits achieved (quantitative ranking). T e two rankings, and places will be allocated and s will be allocated according to the qualitative cated according to the following quotas: Quota back according to the Faculty of Biology; an allocated by lot. Quota 2 (25% of places): nur he same number of subject semesters, places	s degree subject Biolog uotas: 95% of places w d 5% of places (a minim e (Biology) with 60 ECTS atik (Mathematics), eac tudents of other 'import as, the remaining places c, several courses with a ent. In this case, places ure. In this procedure, a ective module will be give available. Selection put cachievements. For this their average grade of a gy) (excluding Chemie (C as follows: First, applicat credits (qualitative ran The applicants' position ccording to this third ra e ranking or otherwise b a 1 (50% of places): tota mong applicants with the mober of subject semested	ie (Biology) with 180 ECTS cre- ill be allocated to students of the bum of one participant in total) credits and to students of the h with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants restricted number of places, the- on all courses of a module com- pplicants who already have suc- iven preferential consideration. A rocess group 1 (95%): Places will purpose, applicants will be ran- ll assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- king) and, secondly, according in a third ranking will be calcu- nking. Among applicants with by lot. Selection process group 2 al number of ECTS credits already he same number of ECTS credits ers of the respective applicant;
Bachelor's with 1 major C	Computat	ional Mathem	atics (2013)	,	JMU Würzburg • generated	26-Aug-2024 • exam. reg. data re	
				ces will be allocated acc	ording to the selection process of group 1.	· · · · ·	

07-4A4FA-102-m01	The Fa	una of G	ermany						
	ECTS	7	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Course			•	07-4A4FA-1-102: V + 07-4A4FA-2-102: E (+ Ü (no information o (no information on S	on SWS (weekly contact hours) a WS (weekly contact hours) and	and course lang course languag	e available)
	Metho	od of asso	essment	stated Asses ny	l otherwise, success sment in module con 4 ECTS, Method of g written examination Assessment offered Other prerequisites	ful completion of the mponent 07-4A4FA-1 grading: numerical g n (approx. 45 minute d: once a year, summ a: Admission prerequ	rade s) and practical identification a	l completion of of Germany Int ssignment (app cendance of exe	all individual assessments. roduction to the Fauna of Germa- rox. 45 minutes), weighted 1:1 rcises and successful comple-
				•	beginning of the co sment in module co 3 ECTS, Method of g log (approx. 1 to 2 p Assessment offered	urse. mponent o7-4A4FA-2 grading: (not) succes bages per field trip) d: once a year, summ	2-102: Field Excursions on the F ssfully completed ner semester	auna of German	
		prerequis			, , ,		are listed in the section on asse		
Bachelor's with 1 major C	cation	pants an of place	S	follow dits. S Bache will be Bache of the ber of from t re will ponen cessfL waitin prima ked ac studie thema ding to to the lated a the sa (5%): achiev	s: Places will primar should the module b elor's degree subject e allocated to studer elor's degree subject application-oriented places available in o he other quota. Sho be a uniform regula at that are concerned ally completed at lea g list will be maintai rily be allocated acco cording to the numb so r of all module co tik (Mathematics)) a o their average grade ir total number of EC as the sum of these me ranking, places Places will be alloca yed in modules/mod	rily be allocated to st be used in other subject Biologie (Biology) we ats of the Bachelor's as Computational Mar d subject Biology (as one quota exceed the uld there be, within of the courses of d will be allocated in ast one other module ined and places re-al ording to the applicate ber of ECTS credits the ponents in the sub- at the time of applicate e weighted according CTS credits achieved two rankings, and pl will be allocated accord two rankings, and pl will be allocated accord the accord of the fulle components of t	udents of the Bachelor's degree ects, there will be two quotas: g ith 180 ECTS credits and 5% of degree subject Biologie (Biolog thematics and Mathematik (Ma well as potentially to students e number of applications, the re- one module component, severa of one module component. In th a standardised procedure. In th component of the respective m llocated as they become availan ents' previous academic achieved by have achieved and their avec bject of Biologie (Biology) (exclu- tion. This will be done as follow g to the number of ECTS credits (quantitative ranking). The app aces will be allocated according ording to the qualitative ranking following quotas: Quota 1 (50% the Faculty of Biology; among a a 2 (25% of places): number of	e subject Biolog 5% of places w places (a minim y) with 60 ECTS thematics), eac of other 'import emaining places il courses with a nis case, places nis procedure, a nodule will be gi ble. Selection pre- ements. For this erage grade of a uding Chemie (C vs: First, applica (qualitative ran licants' position g to this third ra g or otherwise b of places): tota pplicants with th <u>subject semeste</u> 24 • exam. reg. data ref	ill be allocated to students of the num of one participant in total) credits and to students of the h with 180 ECTS credits, as part ing' subjects). Should the num- s will be allocated to applicants restricted number of places, the- on all courses of a module com- pplicants who already have suc- ven preferential consideration. A rocess group 1 (95%): Places will purpose, applicants will be ran- ll assessments taken during their Chemistry), Physik (Physics), Ma- ints will be ranked, firstly, accor- king) and, secondly, according in a third ranking will be calcu- nking. Among applicants with y lot. Selection process group 2 al number of ECTS credits already he same number of ECTS credits ers of the respective applicant; ecord 82 f24 - - H 2013 page 17 / 43
							in the Bachelor's degree subje		ogy) with 180 ECTS credits, pla-
				Les WI	iii be allocated accol	runing to the selection	1 process of group 1.		

07-4S1N-	Neurot	biology	1								
V01-102-m01	ECTS	5	Duration	ı	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Course	es		P (no	P (no information on SWS (weekly contact hours) and course language available)						
	Metho	Method of assessment			methods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- nation 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); students will be informed about the method and length of the assessment prior to the course						
	other p	orerequi	sites	Admis	Admission prerequisite to assessment: regular attendance of lab course as specified at the beginning of the course.						
	Partici	pants an of place	nd allo-	Numb follow dits. S Bache will be of the ber of from t re will poner cessfu waitir prima ked a studie thema ding t to the lated the sa (5%): achiev achiev amon catior	per of places: 20. Sh ys: Places will prima Should the module elor's degree subject e allocated to stude elor's degree subject places available in the other quota. Sh l be a uniform regul nt that are concerne ully completed at le og list will be mainta rily be allocated ac ccording to the num es or of all module of atik (Mathematics)) o their average grad ir total number of E as the sum of these ame ranking, places Places will be alloc ved in modules/mo ved, places will be g applicants with the by lot. Should the	nould the number of applications exceed the num arily be allocated to students of the Bachelor's deg be used in other subjects, there will be two quota at Biologie (Biology) with 180 ECTS credits and 5% ents of the Bachelor's degree subject Biologie (Bio cts Computational Mathematics and Mathematik (ed subject Biology (as well as potentially to studen one quota exceed the number of applications, the ould there be, within one module component, sev ation for the courses of one module component, sev ation for the courses of one module component. I east one other module component of the respectiv ained and places re-allocated as they become ava cording to the application. This will be done as fo de weighted according to the number of ECTS credits at the time of application. This will be done as fo de weighted according to the number of ECTS credits act or ankings, and places will be allocated accord s will be allocated according to the qualitative ranking). The a etwo rankings, and places will be allocated accord and according to the following quotas: Quota 1 (bo dule components of the Faculty of Biology; amon allocated by lot. Quota 2 (25% of places): number the same number of subject semesters, places will module be used only in the Bachelor's degree sul providing to the selection process of group 1.	ber of available pl gree subject Biolo s: 95% of places v of places (a minin logy) with 60 ECT Mathematics), ea hts of other 'impore e remaining place eral courses with n this case, places n this procedure, a e module will be g ilable. Selection p evements. For this average grade of a xcluding Chemie (llows: First, applic lits (qualitative ran pplicants' positio ding to this third r king or otherwise 50% of places): to g applicants with of subject semes be allocated by lo	aces, places will be allocated as gie (Biology) with 180 ECTS cre- vill be allocated to students of the mum of one participant in total) S credits and to students of the ch with 180 ECTS credits, as part rting' subjects). Should the num- es will be allocated to applicants a restricted number of places, the- s on all courses of a module com- applicants who already have suc- given preferential consideration. A process group 1 (95%): Places will s purpose, applicants will be ran- all assessments taken during their (Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 tal number of ECTS credits already the same number of ECTS credits ters of the respective applicant; ot. Quota 3 (25% of places): allo-			

07-4S1N-	Integra	itive Be	havioral Bi	iology							
VO2-102-m01	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Course	S	١	V + S (no information on SWS (weekly contact hours) and course language available)							
	Methoo	1 of ass	r F	methods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- nation 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); students will be informed about the method and length of the assessment prior to the course							
	other p	orerequi	á	Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.							
		pants ar of place	nd allo- es f E E E E E E E E E E E E E E E E E E E	Numb follow dits. S Bache will be Bache of the ber of from t re will poner cessft waitin prima ked ac studie thema ding t to the lated the sa (5%): achiev achiev achiev achiev achiev achiev achiev achiev achiev achiev achiev achiev achiev achiev studie the sa	ber of places: 20. Sh ys: Places will prima Should the module be elor's degree subject e allocated to stude elor's degree subject application-oriente places available in the other quota. Sho be a uniform regula not that are concerne ully completed at leas rilly be allocated acco ccording to the num es or of all module c atik (Mathematics)) to their average grad wir total number of Eq as the sum of these ame ranking, places Places will be allocated ved in modules/mo- ved, places will be allocated g applicants with the by lot. Should the	nould the number of applications exceed the num arily be allocated to students of the Bachelor's de be used in other subjects, there will be two quota at Biologie (Biology) with 180 ECTS credits and 5% ents of the Bachelor's degree subject Biologie (Bi at S Computational Mathematics and Mathematik ed subject Biology (as well as potentially to stude one quota exceed the number of applications, t ould there be, within one module component, se ation for the courses of one module component, se ation for the courses of one module component. ed will be allocated in a standardised procedure. the and places re-allocated as they become av cording to the application. This will be done as for the of ECTS credits they have achieved and their components in the subject of Biologie (Biology) (a t the time of application. This will be done as for de weighted according to the number of ECTS cre ated according to the following quotas: Quota 1 (bodule components of the Faculty of Biology; amor allocated by lot. Quota 2 (25% of places): numbe ne same number of subject semesters, places will module be used only in the Bachelor's degree su pording to the selection process of group 1.	egree subject Biolog as: 95% of places w % of places (a minin iology) with 60 ECTS (Mathematics), ead ents of other 'impor he remaining place veral courses with a In this case, places In this procedure, a ve module will be g vailable. Selection p hievements. For this r average grade of a excluding Chemie ((ollows: First, applica- tedits (qualitative rar applicants' position rding to this third ra- nking or otherwise b (50% of places): tot ng applicants with t er of subject semest Il be allocated by lo	gie (Biology) with 180 ECTS cre- vill be allocated to students of the num of one participant in total) S credits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants a restricted number of places, the- s on all courses of a module com- applicants who already have suc- given preferential consideration. A process group 1 (95%): Places will s purpose, applicants will be ran- all assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 tal number of ECTS credits already the same number of ECTS credits ters of the respective applicant; ot. Quota 3 (25% of places): allo-			

07-4S1M-	Basics	in Light	- and Elec	tron-N	Microscopy							
Z1-102-m01	ECTS	5	Duration	า	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	writte	written examination (approx. 30 to 60 minutes)							
	other prerequisites			Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.								
		oants ar	S	follow dits. S Bache will be Bache of the ber of from t re will poner cessfu waitir prima ked a studie the a studie the sa (5%): achie achie sache sache ber of from t re will poner cessfu to the lated to the achie sache s sache s sache s sa	vs: Places will prim Should the module elor's degree subje e allocated to stud- elor's degree subje e application-orient f places available in the other quota. Sh l be a uniform regu nt that are concern- ully completed at le ng list will be maint arily be allocated ac coording to the nur es or of all module atik (Mathematics)) to their average gra eir total number of f as the sum of thes ame ranking, place Places will be alloc ved in modules/mo ved, places will be ng applicants with t n by lot. Should the	arily be allocated to studen be used in other subjects, at Biologie (Biology) with 18 ents of the Bachelor's degre tes Computational Mathem red subject Biology (as well n one quota exceed the nun ould there be, within one m lation for the courses of one ed will be allocated in a sta east one other module comp tained and places re-allocat coording to the applicants' p mber of ECTS credits they ha components in the subject) at the time of application. de weighted according to the ECTS credits achieved (quar e two rankings, and places s will be allocated according cated according to the follow odule components of the Fa allocated by lot. Quota 2 (2 he same number of subject	ts of the Bachelor's degre there will be two quotas: 9 30 ECTS credits and 5% of ee subject Biologie (Biolog atics and Mathematik (Ma as potentially to students nber of applications, the r nodule component, severa e module component. In t ndardised procedure. In th ponent of the respective n ted as they become availa previous academic achiev ave achieved and their ave of Biologie (Biology) (excl This will be done as follow he number of ECTS credits ntitative ranking). The app will be allocated accordin g to the qualitative rankin wing quotas: Quota 1 (50% aculty of Biology; among a 25% of places): number of semesters, places will be e Bachelor's degree subje	es subject Biolog 95% of places w places (a minim gy) with 60 ECTS athematics), eac of other 'import remaining places al courses with a his case, places his procedure, a nodule will be gi ble. Selection p rements. For this erage grade of a luding Chemie ((ws: First, applica s (qualitative ran olicants' position ag to this third ran g or otherwise b % of places): tota subject semest e allocated by log	aces, places will be allocated as gie (Biology) with 180 ECTS cre- vill be allocated to students of the num of one participant in total) 5 credits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants a restricted number of places, the- s on all courses of a module com- applicants who already have suc- iven preferential consideration. A rocess group 1 (95%): Places will s purpose, applicants will be ran- tll assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 cal number of ECTS credits already he same number of ECTS credits, pla-			

07-4S1M-	Analys	is of Ch	romosome	es								
Z2-102-m01	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	s		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	written examination (approx. 30 to 60 minutes)								
	other p	other prerequisites			Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.							
		oants an	S	follow dits. S Bache will be Bache of the ber of from t re will poner cessfu waitin prima ked ac studie thema ding t to the lated a (5%): achiev achiev achiev studie to the sache studie to the lated a studie to the sache studie to sache studie to sache studie studie to sache studie st	vs: Places will prim Should the module elor's degree subje e allocated to stud elor's degree subje application-orient f places available in the other quota. Sh l be a uniform regunt that are concern- ully completed at lang ist will be maint will be allocated at ccording to the numer es or of all module atik (Mathematics)) to their average gra ir total number of f as the sum of thes ame ranking, place Places will be allow ved in modules/moved, places will be g applicants with the by lot. Should the	hould the number of applications exceed the number arily be allocated to students of the Bachelor's of the be used in other subjects, there will be two quote ents of the Bachelor's degree subject Biologie (for ents of the Bachelor's degree subject Biologie (for exts Computational Mathematics and Mathemati- ted subject Biology (as well as potentially to stud- n one quota exceed the number of applications, nould there be, within one module component, subject Biologie (for east one other module component of the respec- tained and places re-allocated as they become a coording to the application. This will be done as ade weighted according to the number of ECTS credits they have achieved and the components in the subject of Biologie (Biology)) at the time of application. This will be done as ade weighted according to the number of ECTS credits action for the courses of the subject of Biologie (Biology)) at the time of application. This will be done as ade weighted according to the number of ECTS credits actual according to the number of ECTS credits achieved (quantitative ranking). The set wo rankings, and places will be allocated according to the subject semesters, places we cated according to the following quotas: Quota 2 allocated by lot. Quota 2 (25% of places): number allocated by lot. Quota 2 (25% of places): number the same number of subject semesters, places we cording to the selection process of group 1.	degree subject Biolog otas: 95% of places w 5% of places (a minim Biology) with 60 ECTS ik (Mathematics), eac idents of other 'import , the remaining places several courses with a at. In this case, places e. In this procedure, a ctive module will be gi available. Selection p achievements. For this eir average grade of a d) (excluding Chemie ((5 follows: First, application cording to this third ra ranking or otherwise b 1 (50% of places): tota long applicants with the ber of subject semesta	gie (Biology) with 180 ECTS cre- vill be allocated to students of the num of one participant in total) 5 credits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants a restricted number of places, the- s on all courses of a module com- applicants who already have suc- iven preferential consideration. A rocess group 1 (95%): Places will s purpose, applicants will be ran- tll assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 cal number of ECTS credits already he same number of ECTS credits ters of the respective applicant; t. Quota 3 (25% of places): allo-				

07-4S1M-	Special Bioinformatics 1													
Z6-102-m01	ECTS 5	Duratio	n	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 a	issessment	U V V	log (approx. 10 to 20 pages) Language of assessment: German or English										
	other prerec	quisites			e to assessment: regular attendance of exercis inning of the course.	ses and successful comp	oletion of the respective exercises							
	Participants cation of pla		follov dits. Bach will b Bach of the ber o from re wil pone cessf waiti prima ked a studi them ding to the lated the s (5%): achie amor catio	ws: Places will prin Should the module elor's degree subje e allocated to stude elor's degree subje e application-orien f places available the other quota. S Il be a uniform regent that are concern fully completed at ng list will be main arily be allocated at according to the number of as the sum of the ame ranking, places will be alloc eved in modules/m eved, places will be ng applicants with n by lot. Should th	Should the number of applications exceed the marily be allocated to students of the Bachelo le be used in other subjects, there will be two lect Biologie (Biology) with 180 ECTS credits a dents of the Bachelor's degree subject Biolog jects Computational Mathematics and Mathemated subject Biology (as well as potentially to in one quota exceed the number of applicatios found there be, within one module component will be allocated in a standardised proceed least one other module component of the rest natined and places re-allocated as they becomponents in the subject of Biologie (Biologie) at the time of application. This will be done rade weighted according to the number of ECTS feedits achieved (quantitative ranking) are two rankings, and places will be allocated according to the qualitation for the following quotas: Quo nodule components of the Faculty of Biology; e allocated by lot. Quota 2 (25% of places): no the same number of subject semesters, place the module be used only in the Bachelor's degree with the selection process of group 1.	or's degree subject Biolo quotas: 95% of places w and 5% of places (a mining gie (Biology) with 60 ECT matik (Mathematics), ea students of other 'impor- ons, the remaining place nt, several courses with nent. In this case, places dure. In this procedure, a spective module will be g me available. Selection p ic achievements. For this d their average grade of a ogy) (excluding Chemie (e as follows: First, applic TS credits (qualitative rate according to this third ra- ve ranking or otherwise ota 1 (50% of places): to among applicants with the umber of subject semesi es will be allocated by lo	gie (Biology) with 180 ECTS cre- vill be allocated to students of the num of one participant in total) S credits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants a restricted number of places, the- s on all courses of a module com- applicants who already have suc- given preferential consideration. A process group 1 (95%): Places will s purpose, applicants will be ran- all assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 tal number of ECTS credits already the same number of ECTS credits ters of the respective applicant; ot. Quota 3 (25% of places): allo-							

07-4S1PS1-102-	Molecu	ılar moo	lelling - Fro	om DN	IA to protein							
m01	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S	١	V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass		computerised practical examination (approx. 6 hours)								
	other p	rerequi	sites A	Admis as spe	ssion prerequisite	e to assessment: regula inning of the course.	r attendance of exercises and s	uccessful comp	letion of the respective exercises			
	Particip cation of		s f E E V E C C E C C E C C C C C C C C C C	follow dits. S Bache will be Bache of the ber of from t re will ponen cessfu waitin prima ked ac studie thema ding to to the lated a the sa (5%): achiev achiev achiev achiev	vs: Places will prin should the module of s degree sub- e allocated to stu- elor's degree sub- application-orient places available the other quota. Selection that are concer- ully completed at rily be allocated cording to the main rily be allocated cording to the main rily be allocated cording to the main rily be allocated atik (Mathematics o their average g ir total number o as the sum of the ame ranking, place Places will be all ved in modules/r ved, places will b g applicants with the by lot. Should the	marily be allocated to sile be used in other subj ject Biologie (Biology) we dents of the Bachelor's jects Computational Ma nted subject Biology (as in one quota exceed the Should there be, within gulation for the courses red will be allocated in the least one other module ntained and places re-a according to the application according to the application in the time of application fECTS credits achieved ese two rankings, and places set will be allocated according fects credits achieved ese two rankings, and places according to the subject according fects credits achieved ese two rankings, and places according to the subject according fects credits achieved according to the module components of the module components of the set he same number of subjects.	tudents of the Bachelor's degree ects, there will be two quotas: of vith 180 ECTS credits and 5% of degree subject Biologie (Biologi thematics and Mathematik (Ma s well as potentially to students e number of applications, the re- one module component, severa of one module component, severa of one module component. In the a standardised procedure. In the component of the respective m llocated as they become availa- ants' previous academic achieved hey have achieved and their avec bject of Biologie (Biology) (exclu- ation. This will be done as follow g to the number of ECTS credits (quantitative ranking). The app laces will be allocated accordin ording to the qualitative ranking following quotas: Quota 1 (50% the Faculty of Biology; among a a 2 (25% of places): number of ibject semesters, places will be in the Bachelor's degree subje	e subject Biolog 95% of places w places (a minim gy) with 60 ECTS of other 'import emaining places al courses with a his case, places nis procedure, a nodule will be gi ble. Selection p ements. For this erage grade of a uding Chemie ((ws: First, applica (qualitative ran licants' positior g to this third ra g or otherwise b 6 of places): tota pplicants with the subject semesta	ill be allocated to students of the hum of one participant in total) credits and to students of the h with 180 ECTS credits, as part ing' subjects). Should the num- s will be allocated to applicants restricted number of places, the- on all courses of a module com- pplicants who already have suc- ven preferential consideration. A rocess group 1 (95%): Places will purpose, applicants will be ran- ll assessments taken during their Chemistry), Physik (Physics), Ma- ints will be ranked, firstly, accor- king) and, secondly, according in a third ranking will be calcu- nking. Among applicants with y lot. Selection process group 2 al number of ECTS credits already ne same number of ECTS credits			

07-4S1PS2-102-	Introduction to Method	s in Plant Ecophysiolog	/								
m01	ECTS 5 Duratio	n 1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	Ü + S (no information o	Ü + S (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment	log (approx. 10 to 20 pages)									
	other prerequisites		e to assessment: regula s specified at the begin		eminar as well	as successful completion of the					
	Participants and allo- cation of places	Number of places: 15. follows: Places will prind dits. Should the modu Bachelor's degree sub will be allocated to stu Bachelor's degree sub of the application-orient ber of places available from the other quota. S re will be a uniform reg ponent that are concer cessfully completed at waiting list will be mai primarily be allocated ked according to the mistudies or of all modul thematik (Mathematics ding to their average g to their total number o lated as the sum of the the same ranking, place (5%): Places will be all achieved in modules/r achieved, places will b among applicants with	Should the number of a marily be allocated to si e be used in other subj ect Biologie (Biology) w dents of the Bachelor's fects Computational Ma nted subject Biology (as in one quota exceed the should there be, within ulation for the courses ned will be allocated in least one other module ntained and places re-a according to the applicate according to the applicate add weighted according f ECTS credits achieved set wo rankings, and p es will be allocated according f ECTS credits achieved set wo rankings, and p es will be allocated according to the nodule components of e allocated by lot. Quot the same number of super the module be used only	pplications exceed the number pplications exceed the number tudents of the Bachelor's degree ects, there will be two quotas: of vith 180 ECTS credits and 5% of degree subject Biologie (Biologie thematics and Mathematik (Ma s well as potentially to students e number of applications, the re- one module component, several of one module component. In the a standardised procedure. In the e component of the respective m llocated as they become availal ants' previous academic achieve hey have achieved and their ave bject of Biologie (Biology) (exclu- ation. This will be done as follow g to the number of ECTS credits (quantitative ranking). The app laces will be allocated according ording to the qualitative ranking following quotas: Quota 1 (50% the Faculty of Biology; among an a 2 (25% of places): number of ubject semesters, places will be in the Bachelor's degree subject	e subject Biolog places (a minin gy) with 60 ECTS of other 'impor emaining place of other 'impor emaining place and courses with a nis case, places nodule will be g ble. Selection p ements. For this erage grade of a uding Chemie (vs: First, applica (qualitative rar licants' position g to this third ra g or otherwise b 6 of places): tot pplicants with t subject semest	A solution of a second provide the second provide t					

07-4S1PS3-102-	Pharmaceutical Drugs in Plants													
m01	ECTS	5	Duration	1 semeste	,	Method of grading	numerical grade	Modul level	undergraduate					
	Course	!S	Ü.	+ S (no inform	tion on SV	WS (weekly contac	t hours) and course lanរ្	guage available)						
	Metho	d of ass	na pe	methods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- nation 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); students will be informed about the method and length of the assessment prior to the course										
	other p	orerequi					ar attendance of exercis ning of the course.	es and seminar as well a	as successful completion of the					
		pants ar of place	es fol dit Ba wil Ba of be fro re po ce: wa pri ke stu the dir to lat the (5° ac ac ac ar ca	llows: Places v is. Should the ichelor's degre il be allocated ichelor's degre the applicatio or of places ava- om the other q will be a unifo- nent that are of sfully comple- aiting list will b imarily be allo d according to udies or of all be ematik (Mathe- ng to their ave their total num- ee same rankin %): Places will hieved in mod hieved, places nong applican- tion by lot. Sh	ill primaril nodule be e subject I to student e subjects n-oriented ilable in o ota. Shou m regulati oncerned red at leas e maintair ated acco the numb- nodule con natics)) at age grade ber of ECT of these tw places w be allocat ules/modu will be all s with the nuld the m	ily be allocated to see used in other sub Biologie (Biology) y ts of the Bachelor's computational M I subject Biology (a one quota exceed th ald there be, within tion for the courses will be allocated in st one other modul ned and places re- ording to the applic per of ECTS credits a mponents in the su t the time of applic e weighted accordin TS credits achieved wor rankings, and p will be allocated ac ted according to th ule components of located by lot. Quo e same number of s nodule be used onl	students of the Bachelon jects, there will be two with 180 ECTS credits ar s degree subject Biologi athematics and Mathem s well as potentially to so the number of application one module component of one module component of one module component of one module component of a standardised proced e component of the resp allocated as they becom ants' previous academi they have achieved and ubject of Biologie (Biolo ation. This will be done ing to the number of ECT I (quantitative ranking). places will be allocated cording to the qualitative following quotas: Quo the Faculty of Biology; ta 2 (25% of places): nu ubject semesters, place	r's degree subject Biolog quotas: 95% of places w nd 5% of places (a minim ie (Biology) with 60 ECTS natik (Mathematics), eac students of other 'import ons, the remaining places not, several courses with a nent. In this case, places dure. In this procedure, a pective module will be gin to achievements. For this their average grade of a ogy) (excluding Chemie (C as follows: First, applicat S credits (qualitative ran The applicants' position according to this third ra ve ranking or otherwise b ota 1 (50% of places): tota among applicants with the umber of subject semest	ces, places will be allocated as gie (Biology) with 180 ECTS cre- vill be allocated to students of the num of one participant in total) 5 credits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the num- s will be allocated to applicants a restricted number of places, the- on all courses of a module com- applicants who already have suc- iven preferential consideration. A rocess group 1 (95%): Places will s purpose, applicants will be ran- tll assessments taken during their Chemistry), Physik (Physics), Ma- ants will be ranked, firstly, accor- nking) and, secondly, according n in a third ranking will be calcu- anking. Among applicants with by lot. Selection process group 2 al number of ECTS credits already he same number of ECTS credits ers of the respective applicant; t. Quota 3 (25% of places): allo- logy) with 180 ECTS credits, pla-					

07-S1-LP1-102-m01	Laborat	tory pra	ctical cou	irse l	,					_			
· .		5	Duration		1 semester	Method of grad	ling numerical grad	е	Modul level	undergraduate			
	Courses	S		P (no	information on SW	S (weekly contac	hours) and course l	anguage availa	ble)				
	Method	l of asse	essment	natio per ca	nethods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- ation of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes er candidate) or e) presentation (approx. 20 to 30 minutes); students will be informed about the method and length of the ssessment prior to the course								
	other p	rerequis	sites		dmission prerequisite to assessment: regular attendance of lab course as specified at the beginning of the course; ple onsult with academic advisory service in advance.								
07-S1-Ex1-102-m01	Excursi	on I											
	ECTS	5	Duration	า	1 semester	Method of grad	ling numerical grad	е	Modul level	undergraduate			
	Courses	S		E (no	information on SW	S (weekly contact	hours) and course l	anguage availa	ble)				
	Method	l of asse	essment	natio per ca	ods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- in of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minute andidate) or e) presentation (approx. 20 to 30 minutes); students will be informed about the method and length of the ssment prior to the course								
	other p	rerequis	sites		ssion prerequisite vith academic advis			field trip as spe	cified at the be	ginning of the course; please con-			
07-S1-IP1-102-m01	Interdis	sciplina	ry Project										
	ECTS	5	Duration	า	1 semester	Method of grad	ling numerical grad	е	Modul level	undergraduate			
	Courses	S		R (no	information on SW	S (weekly contac	hours) and course l	anguage availa	ble)				
	Method	l of asse	essment	natio per ca	nethods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exam nation of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minu per candidate) or e) presentation (approx. 20 to 30 minutes); students will be informed about the method and length of the assessment prior to the course								
	other p	rerequis	sites		ssion prerequisite e consult with acae			project session	s as specified a	It the beginning of the course;			
07-5EP-102-m01	Externa	l Practi	cal Cours	e									
	ECTS	10	Duration	า	1 semester	Method of grad	ling numerical grad	e	Modul level	undergraduate			
	Courses	S		P (no	information on SW	S (weekly contac	hours) and course l	anguage availa	ble)				
	Method	l of asse	essment	natio per ca	n of one candidate	each (approx. 30 entation (approx	minutes) or d) oral e	xamination in g	groups of up to	. 10 to 20 pages) or c) oral exami- 3 candidates (approx. 20 minutes It the method and length of the			
	other p	rerequis	sites		ssion prerequisite ult with academic a			lab course as s	pecified at the	beginning of the course; please			

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 26 / 43

07-S2-EX2-102-	Excurs	ion II									
mo1	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Course	S		E (no	information on SWS	(weekly contact hours) and course language availa	ıble)				
	Methoo	d of ass	essment	natio per ca	nethods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- ation of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes er candidate) or e) presentation (approx. 20 to 30 minutes); students will be informed about the method and length of the ssessment prior to the course						
	other p	other prerequisites			dmission prerequisite to assessment: regular attendance of field trip as specified at the beginning of the course; please con- Ilt with academic advisory service in advance.						
07-S2-IP2-102-	Interdi	sciplina	ary Projec	t II							
m01	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses			R (no	information on SWS	(weekly contact hours) and course language availa	ıble)				
	Methoo	Method of assessment			nethods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- nation 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); students will be informed about the method and length of the assessment prior to the course						
	other p	other prerequisites				assessment: regular attendance of project sessior emic advisory service in advance.	ns as specified a	t the beginning of the course;			
07-S2-LP2-102-	Labora	tory Pra	actical Co	urse II							
m01	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Course	S		P (no	information on SWS	(weekly contact hours) and course language availa	ible)				
	Methoo	d of ass	essment	natio per ca	methods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral exami- nation 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); students will be informed about the method and length of the assessment prior to the course						
	other p	orerequi	sites			assessment: regular attendance of lab course as s visory service in advance.	pecified at the b	beginning of the course; please			

07-SQF-0SB-102-	Organi	sation a	and Safety	y in Bio	osciences								
m01	ECTS	5	Duratio	ก	1 semester		Method o	ofgrading	numerical	grade	Modul level	undergraduate	
	Course	S	_	V + S	' + S (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment	a) wri	itten examina	ation (3	30 to 60 mir	nutes) and	b) presenta	ition (approx. 1	o minutes) or term	paper (approx. 5 to 10 pages)	
		oants ar										laces, places will be allocated as	
	cation	of place	es									ogie (Biology) with 180 ECTS cre-	
												will be allocated to students of the imum of one participant in total)	
				will b	e allocated t	o stude	ents of the B	Bachelor's	degree sub	ject Biologie (B	Siology) with 60 EC1	rS credits and to students of the	
				Bache	elor's degree	subje	cts Comput	ational Ma	thematics a	nd Mathematik	< (Mathematics), ea	ach with 180 ECTS credits, as part	
												orting' subjects). Should the num-	
												es will be allocated to applicants a restricted number of places, the-	
												es on all courses of a module com-	
				pone	nt that are co	ncerne	ed will be al	located in	a standard	sed procedure.	. In this procedure,	applicants who already have suc-	
												given preferential consideration. A	
												process group 1 (95%): Places will is purpose, applicants will be ran-	
												all assessments taken during their	
				studi	es or of all m	odule	component	s in the su	bject of Bio	logie (Biology)	(excluding Chemie	(Chemistry), Physik (Physics), Ma-	
												cants will be ranked, firstly, accor-	
												anking) and, secondly, according on in a third ranking will be calcu-	
												ranking. Among applicants with	
				the sa	ame ranking,	places	s will be allo	ocated acc	ording to th	e qualitative ra	nking or otherwise	by lot. Selection process group 2	
												otal number of ECTS credits already	
												the same number of ECTS credits sters of the respective applicant;	
												ot. Quota 3 (25% of places): allo-	
												ology) with 180 ECTS credits, pla-	
					vill be allocat						, ,		
Application-orient	ed Subje	ct Cher	nistry										
Application-orient	ed Subje	ct Cher	nistry Con	npulso	ory Courses (26 ECT	'S credits)						
11-EFNF-072-m01	!	iction te	o Physics	for Stı	udents of No	n-phys	ics-related	Minor Sul	ojects				
	ECTS	7	Duratio	~	2 semester				numerical	-	Modul level	undergraduate	
	Course	S		V + V	(no informat	ion on	SWS (week	ly contact	hours) and	course languag	ge available)		
	Method of assessment			writte	rritten examination (approx. 120 minutes)								

l	meenou of assessment	(index examination (approx 120 innuces)
	Participants and allo- cation of places	Only as part of pool of general key skills (ASQ): 10 places. Places will be allocated by lot.

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 28 / 43
--	---	--------------

08-PC1-092-m01	Physic	al Chen	nistry 1									
	ECTS	8	Duration	า	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Course	!S		V + Ü	+ V + Ü (no inforr	nation on SWS (weekl	y contact hours) and	course langu	age available)			
	Methoo	d of ass	sessment	writte	en examinations:) oral examination of			ations: 60 or 90 minutes each; 3 ox. 20 minutes) or c) oral examina-		
	other p	prerequi	sites	ning	dmission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the begin- ing of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually maximum of 2 incidents of unexcused absence).							
08-CM1-112-m01	Introdu	uction t	o Inorgani	c Che	nistry for Studen	ts of Mathematics and	d other Subjects					
	ECTS	6	Duration	า	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Course	s		V (no	information on S	WS (weekly contact h	ours) and course lang	uage availab	le)	·		
	Metho	d of ass	essment	writte	n examination (a	pprox. 90 minutes)						
08-0C1-092-m01	Organi	ic Chem	istry 1									
	ECTS	5	Duration	า	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Courses			V + Ü	(no information of	on SWS (weekly conta	ct hours) and course l	language ava	ilable)			
	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 examina- tion in groups (groups of 2, approx. 30 minutes)							
	other prerequisites			ning	of the course (usu		to be successfully co			classes as specified at the begin- r attendance of exercises (usually		
	Referre	ed to in	LPO I	§62	§ 62 (1) 2. Chemie "Organische und Bioorganische Chemie"							
Application-orient	ed Subje	ct Cher	nisty Com	pulso	y Electives							
08-TC-092-m01	Theore	tical M	odels in C	hemis	try							
	ECTS	3	Duration	า	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Course	s		V + Ü	(no information (on SWS (weekly conta	ct hours) and course l	language ava	ilable)	•		
	Methoo	d of ass	essment	each	a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examinations: approx. 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)							
	other prerequisites			ning	Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the begin- ning 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-PC3-092-m01	Physic	al and 1	heoretica	l Chen	nistry 3: Symmetr	y and Quantum Chemistry						
	ECTS	6	Duratio	า	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Course	:S		V + Ü	V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Metho	d of ass	essment	exam	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)							
	other p	orerequi	sites	ning	dmission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the begin- ing of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually maximum of 2 incidents of unexcused absence).							
08-0C2-102-m01	Organi	c Chem	istry 2									
	ECTS	9	Duratio	า	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Course	s		V + V	+ Ü (no informatio	on on SWS (weekly contact ho	ours) and course langu	uage available)				
	Method of assessment			each; c) ora	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		08-00	21								
	other prerequisites			ning o	of the course (usu				classes as specified at the begin- rattendance of exercises (usually			
Application-oriente	ed Subje	ect Com	puter Scie	nce								
10-I-AGT-122-m01	Algorit	hmic G	raph Theo	ry								
	ECTS	5	Duratio	า	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Course	!S		V + Ü	(no information o	n SWS (weekly contact hours) and course language	e available)	•			
	Metho	d of ass	essment	writte didat	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: English, German if agreed upon with the examiner							
	other prerequisites			Wher	e applicable, prer	equisites as specified by the	lecturer at the beginni	ing of the course (e	e.g. completion of exercises).			

10-I-ADS-102-m01	Algorit	hm and	data stru	ctures								
	ECTS	10	Duratio	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	e available)	•			
	Method of assessment			writte 90 m	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.							
	other p	orerequis	sites	Admi cours		o assessment: exercis	ses (type and scope to be a	nnounced by the le	cturer at the beginning of the			
	Referre	ed to in L	PO I				k, Algorithmen und Datenst k, Algorithmen und Datenst					
10-I-ST-102-m01	Softwa	re Tech	nology									
	ECTS	10	Duratio	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	e available)	_			
	Method of assessment			written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.								
		orerequis	_	cours	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).							
	Referre	ed to in L	.PO I		 § 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie § 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie 							
10-I-PP-102-m01	Practical Course in Programming											
	ECTS	10	Duratio	n	1 semester	Method of grading	(not) successfully complet	ed Modul level	undergraduate			
	Course	S		P (no	P (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			writte 90 m	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.							
	other p	orerequis	sites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).							
				Addit	ional information or	n module duration: 1 t	o 2 semesters.					
	Referre	ed to in L	PO I			raktische Softwareent raktische Softwareen						

10-I-SWP-102-m01	Practic	al cours	e in softv	vare									
	ECTS	10	Duration	1	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate				
	Course	s		P (no	P (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment	comp	completion of project assignments, presentation								
	Referre	Referred to in LPO I			4 9 (1) 1. c) Informatik Praktische Softwareentwicklung 6 9 (1) 1. d) Informatik Praktische Softwareentwicklung								
.o-I-RAL-102-m01	Digital	comput	er systen	15									
	ECTS	10	Duration	1	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)					
				writte 90 mi (appr	n examination can l nute written examir ox.) oral examinatio	be replaced by an ora nation is equivalent to n in groups of 2 and	il examination of one candidat o a 20 minute (approx.) oral ex a 40 minute (approx.) oral exa	e each or an ora amination of on mination in grou	_				
	other prerequisites			cours	e).		ses (type and scope to be anno	ounced by the le	cturer at the beginning of the				
	Referred to in LPO I				69 (1) 1. c) Informatik Technische Informatik								
10-I-IÜ-102-m01	Information Transmission												
	ECTS 10 Duration				1 semester	Method of grading	=	Modul level	undergraduate				
	Courses					. ,	hours) and course language a	,					
	Method of assessment			writte 90 mi	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.								
	other prerequisites			Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).									
	Referre	d to in L	POI	§69(§ 69 (1) 1. c) Informatik Technische Informatik								
10-l-Tl-102-m01	Theoretical informatics												
	ECTS	10	Duration	1	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	d of asso	essment	writte 90 mi	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.								
	other p			cours	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).								
	Referre	d to in L	PO I	§ 49 (§ 69 (1) 1. a) Informatik Tl 1) 1. a) Informatik Tl	neoretische Informati heoretische Informati	k, Algorithmen und Datenstrul k, Algorithmen und Datenstrul	kturen kturen					

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 32 / 43

10-I-LOG-102-m01	Logic f	or inforn	natics										
	ECTS	6	Duratior	า	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method	l of asse	essment	writte	vritten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the vritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one can- lidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)								
	other p	orerequis	sites	Admi cours	Imission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the								
10-I-DB-102-m01	Databa	ses											
	ECTS	5	Duration	۱	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S		V + Ü	(no information or	n SWS (weekly cont	act hours) and course la	anguage av	ailable)				
				if ann exam tes, g Langu	ritten examination (approx. 50 to 60 minutes) announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral kamination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minu- es, groups of 3: 25 minutes) anguage of assessment: German, English if agreed upon with the examiner								
	other p	orerequis	sites	cours	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).								
	Referre	d to in L	.PO I	§ 49 (§ 69 (1) 1. b) Datenbank (1) 1. b) Datenbank	systeme und Softwassysteme und Softwa	aretechnologie aretechnologie						
10-I-00P-102-m01	Object-oriented Programming												
	ECTS	5	Duration	า	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S	·	V + Ü	(no information or	n SWS (weekly cont	act hours) and course la	anguage av	ailable)				
	Method	l of asse	essment	writte didat	n examination car e each: 15 minutes	h be replaced by an , groups of 2: 20 mi		e candidate minutes)		prior to the examination date, the l examination in groups (one can-			
	other p	orerequis	sites	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).									
10-I-KT-102-m01	Theory	of Com	plexity										
	ECTS	5	Duration	ı	1 semester	Method of gradi	ng numerical grade		Modul level	undergraduate			
	Course	S		V + Ü	(no information or	n SWS (weekly cont	act hours) and course la	anguage av	ailable)				
	Method	l of asse	essment	writte didat	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one can- didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other p	rerequis	sites	Admi cours		to assessment: exe	rcises (type and scope	to be anno	unced by the le	cturer at the beginning of the			

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 33 / 43

10-I-AR-102-m01	Automation an	d Contro	Techn	ology						
	ECTS 8	Duratio	1	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 asso	essment	writte 90 mi (appre	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner						
	other prerequi		Admis cours		assessment: exercis	ses (type and scope to be an	nounced by the le	cturer at the beginning of the		
10-I-RAK-102-m01	Computer Arch	itecture								
	ECTS 5	Duratio		1 semester	Method of grading		Modul level	undergraduate		
	Courses		V + Ü	(no information on S	SWS (weekly contact	hours) and course language	available)			
	Method of asso		writte didate Langu	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one can- didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner						
	other prerequis	sites	cours	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).						
	Referred to in L	PO I	§69 (1) 1. c) Informatik Te	chnische Informatik					
10-I-RK-102-m01		vorks and	Communication Systems							
	ECTS 8	Duratio		1 semester	Method of grading		Modul level	undergraduate		
	Courses			-		hours) and course language	-			
	Method of asso	essment	writte 90 mi (appre	n examination can b nute written examin ox.) oral examinatior	e replaced by an ora ation is equivalent to n in groups of 2 and a	l examination of one candid	ate each or an ora examination of on amination in grou	prior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ups of 3.		
	other prerequi	sites	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).							
Application-oriente	ed Subject Phys	ics								
Application-oriente	ed Subject Phys	ics Comp	ulsory	Electives 1: Basics						
11-ENNF1-062-m01	Introduction to	Physics	Part 1	for students of Phys	ics Related Minor Su	ıbjects				
	ECTS 7	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			-		hours) and course language	available)			
	Method of ass	essment		n examination (appr						
	Participants ar cation of place		Only a	as part of pool of ger	neral key skills (ASQ)	: 20 places. Places will be al	located by lot.			

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 34 / 43

11-ENNF2-062-m01	Introdu	ction to	Physics	Part 2	for students of	Phys	sics Related Minor	Subjects					
	ECTS	7	Duration	۱	1 semester		Method of gradin	g numerical grad	de	Modul level	undergraduate		
	Courses	5	•	V + Ü	(no information	n on S	SWS (weekly conta	ct hours) and cou	rse language av	ailable)			
	Method	l of ass	essment	writte	en examination ((app	rox. 120 minutes)						
	Particip cation o			Only a	Only as part of pool of general key skills (ASQ): 20 places. Places will be allocated by lot.								
11-KP-092-m01	Classic	al Phys	ics (Mech	anics,	Thermodynami	ics, V	Naves, Oscillation	, Electricity, Mag	netism and Opt	tics)			
	ECTS	16	Duration	า	2 semester		Method of gradin	g numerical grad	de	Modul level	undergraduate		
	Courses	5		(2 we Klass	ekly contact ho ische Physik 2 (urs), (Elek	once a year (winte	r semester) ptik) (Classical Pl			nt)): V (4 weekly contact hours) + Ü otics)): V (4 weekly contact hours)		
	Method	l of ass	essment	1. Top 120 2. Top	pics covered in l p minutes).	lectu		n part 1 (Klassisch	,)): written examination (approx. 2)): written examination (approx.		
				3. Top	pics covered in l		res and exercises i ten examination (a			of one candida	te each (approx. 30 minutes,		
							3 will be offered in approx. 50% of pr). to assessment components 1 and		
					y recommended). The topics dis ents must regist ss this module, rade achieved in ach count 50%	l to a scus er fo stuc n ass towa	Ittend both courses sed in these two co r assessment comp dents must first pas sessment compone Irds the overall grad	Klassische Physi ourses will be cove ponents 1 through s assessment co ont 1 or 2 (whichev de awarded for th	ik 1 (Classical Ph ered in assessm 1 3 online (detail mponent 1 or 2 a ver is better) and e module.	nysics 1) and Ki nent component ls to be announ and must then p d the grade ach	ced). bass assessment component 3. ieved in assessment component 3		
	other p	rerequi	sites	Bridg	e course Mathe	mati	sche Rechenmetho	den der Physik (N	Aathematical Me	ethods of Physi	cs) for first-semester students.		
hen Nebenfachs (Pl	wo modu hysics Pr	ules 11- actical	P-PA Phys Course fo	ikalisc r Stud	hes Praktikum ⁻ ents of Physics-	Teil A -relat	A (Physics Practical ted Minors) must b	e taken; students	-PNNF Physikali are not permitt	sches Praktikur ed to take both	n für Studierende eines physikna- of these modules.		
11-PNNF-062-m01	<u> </u>				· · · · · · · · · · · · · · · · · · ·	ysics	s Related Minor Su	<u>·</u>					
		3	Duration		1 semester		Method of gradin		, ,		undergraduate		
	Courses						(weekly contact h			-			
						-	inutes) during expe		-		prox. 90 minutes)		
	Particip cation o			Only a	as part of pool c	of gei	neral key skills (AS	Q): 15 places. Pla	ces will be alloc	ated by lot.			

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013	page 35 / 43

11-P-PA-112-m01	Lab Co	urse A									
	ECTS	5	Duration	ı 🦷	1 semester	Method of grading	(not) successfully comple	eted	Modul level	undergraduate	
	Course	S		Auswertung von Messungen und Fehlerrechnung (Measurements and Data Analysis): V (1 weekly contact hour) + Ü (1 weekly contact hour), once a year (winter semester) Beispiele aus Mechanik, Wärmelehre und Elektrik (Examples from Mechanics, Thermodynamics and Electricity, BAM): P (2 weekly contact hours)							
	Methoo	d of asse		1. Top 2. Lab (exa (ap)	ics covered in lectu course: a) Preparin am) is passed. b) Ta prox. 30 minutes).	g, performing and ev Ilk (with discussion) t	itten examination (approx aluating the experiments v to test the students' under	will be rstand	considered suing of the phys	uccessfully completed if a Testat sics-related contents of the course	
				Successful completion of approx. 50% of practice work is a prerequisite for admission to assessment component 1. To pass assessment component 2, students must pass both elements a) and b). Students will be offered one opportunity to retake element a) and/or element b). Students must register for assessment components 1 and 2 online (details to be announced). Students must attend Auswertung von Messungen und Fehlerrechnung (Measurements and Data Analysis) before attending Beispiele aus Mechanik, Wärmelehre und Elektrik (Examples from Mechanics, Thermodynamics and Electricity). To pass this module, students must pass both assessment component 1 and assessment component 2.							
	Referred to in LPO I			§ 53 (1 § 77 (1	í) 1. c) Physik physil	kalische Grundpraktil dlagen der Experime		spezi	ellen Relativitä	ätstheorie	
11-P-NFB-122-m01	Basic P	Practical	l Course B	(Mino	r Studies)						
	ECTS	4	Duration	1 I	1 semester	Method of grading	(not) successfully comple	eted	Modul level	undergraduate	
	Course	S		P (no i	information on SWS	(weekly contact hou	rs) and course language a	vailab	le)		
	Method of assessment Modules successfully completed			am) is 30 mii	a) Preparing, performing and evaluating (lab report) the experiments will be considered successfully completed if a Testat (ex- am) is passed. Experiments that were not successfully completed can be repeated once. And b) talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the physics-related contents of the module component. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.						
			essfully	11-P-P	A						
	Additio	nalinfa	rmation	Additional information on module duration: 1 to 2 semesters.							

- 11-KM may neither be combined with 11-QAM nor with 11-FKP.
 - 11-STE may neither be combined with 11-ST nor with 11-ED.

- 11-TQM may neith	ier be cor	nbined	with 11-Tl	M nor v	vith 11-QM.							
11-KM-092-m01	Conden	ised Ma	tter (Qua	nta, At	oms, Molecules, So	lid State Physics)						
	ECTS	16	Duration	n	2 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses			Kondensierte Materie 1 (Quanten, Atome, Moleküle) (Condensed Matter 1 (Quanta, Atoms, Molecules)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Kondensierte Materie 2 (Festkörperphysik 1) (Condensed Matter 2 (Solid State Physics)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)								
	Method	l of asse	essment	This n 1. Top pro 2. Top pro 3. Top usu Asses Succe 2. To qua highly dense Stude To pa: The gi	nodule has the follo ics covered in lectu x. 120 minutes). ics covered in lectu x. 120 minutes). ics covered in lectu ally chosen) or writt sment component ssful completion of alify for admission t recommended to a ed Matter 2). The top nts must register fo ss this module, stuc- rade achieved in ass	wing assessment cor res and exercises in p res and exercises in p res and exercises in p ten examination (app will be offered in Ge approx. 50% of pract to assessment compo tatend both courses K bics discussed in thes r assessment compo dents must first pass sessment component	mponents part 1 (Kondensierte Materie 1 part 2 (Kondensierte Materie 2 parts 1 and 2: oral examination prox. 120 minutes). erman; English if agreed upon tice work each is a prerequisit ponent 3, students must pass as ondensierte Materie 1 (Condensierte Materie 1 (Condensierte se two courses will be covered nents 1 through 3 online (deta assessment component 1 or 2	e (Condensed Ma n of one candidat with examiner(s) e for admission t ssessment comp nsed Matter 1) ar l in assessment c ils to be annound and must then p	o assessment components 1 and onent 1 and/or 2. Students are nd Kondensierte Materie 2 (Con- component 3.			

11-STE-092-m01	Statist	ical Me	chanics, T	hermodynamics and E	hermodynamics and Electrodynamics						
	ECTS	16	Duratior	1 2 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	2S		weekly contact hours)	und Thermodynamik (Statistical Mechanics and , once a year (winter semester) ynamik (Theoretical Electrodynamics): V (4 weekly er)						
	Metho	d of ass	sessment	 Topics covered in le Thermodynamics)): Topics covered in le amination (approx. Topics covered in le 	ollowing assessment components actures and exercises in part 1 (Statistische Mecha written examination (approx. 120 minutes). actures and exercises in part 2 (Theoretische Elektr 120 minutes). actures and exercises in parts 1 and 2: oral examin written examination (approx. 120 minutes).	rodynamik (Theoretic	al Electrodynamics)): written ex-				
				Successful completion 2. Students are highly re and Thermodynamics) courses will be covere Students must registe To pass this module, s The grade achieved in	nt 3 will be offered in German; English if agreed up n of approx. 50% of practice work each is a prereq commended to attend both courses Statistische A and Theoretische Elektrodynamik (Theoretical Ele d in assessment component 3. r for assessment components 1 through 3 online (students must first pass assessment component 1 assessment component 1 or 2 (whichever is bette bowards the overall grade awarded for the module.	uisite for admission t Mechanik und Thermo ectrodynamics). The t (details to be annound or 2 and must then p er) and the grade achi	o assessment components 1 and odynamik (Statistical Mechanics opics discussed in these two ced). bass assessment component 3.				
	other p	orerequi	isites	10-M1-PHY and 10-M2-	PHY or 10-M1-NST and 10-M2-NST						

11-TQM-092-m01	Theore	tical M	echanics a	and Qu	uantum Mechani	cs					
	ECTS	16	Duratior	n	2 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses	S		Theoretische Mechanik (Theoretical Mechanics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Quantenmechanik (Quantum Mechanics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)							
	Method of assessment			 This module has the following assessment components 1. Topics covered in lectures and exercises in part 1 (Theoretische Mechanik (Theoretical Mechanics)): written examination (approx. 120 minutes). 2. Topics covered in lectures and exercises in part 2 (Quantenmechanik (Quantum Mechanics)): written examination (approx. 120 minutes). 3. Topics covered in lectures and exercises in parts 1 and 2: oral examination of one candidate each (approx. 30 minutes, usually chosen) or written examination (approx. 120 minutes). Successful completion of approx. 50% of practice work each is a prerequisite for admission to assessment components 1 and 2. To qualify for admission to assessment component 3, students must pass assessment component 1 and/or 2. Students are highly recommended to attend both courses Theoretische Mechanik (Theoretical Mechanics) and Quantenmechanik (Quantum Mechanics). The topics discussed in these two courses will be covered in assessment component 3. Students must register for assessment components 1 through 3 online (details to be announced). To pass this module, students must first pass assessment component 1 or 2 and must then pass assessment component 3. 							
	other prerequisites			will each count 50% towards the overall grade awarded for the module. 10-M1-PHY, 10-M2-PHY and 11-MPI-3 or 10-M1-NST, 10-M2-NST and MPI-3							
11-ED-092-m01	Theoretical Electrodynamics										
	ECTS 8 Duratio				1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses	S		V + Ü	(no information	on SWS (weekly contact	t hours) and course langu	uage available)			
	Method of assessment			written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.							
	other p	rerequi	sites	tive d on to the le sessr	details at the beg assessment. If s ecturer will put th ment in the curre	ginning of the course. Re students have obtained t neir registration for asse	gistration for the course the qualification for adm ssment into effect. Stude	will be considered a de nission to assessment c ents who meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-		

11-FKP-092-m01	Solid State Physics 1											
	ECTS	8	Duration	า	1 semester	Method of gradi	ng numerical grad	de	Modul level	undergraduate		
	Course	s		V + Ü	(no information o	n SWS (weekly cont	act hours) and cou	irse language av	ailable)			
	Metho	d of ass	essment	written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.								
	other p	orerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respec- tive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissi- on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as- sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quali- fication for admission to assessment anew.								
11-TM-092-m01	Theoretical Mechanics											
	ECTS	8	Duration	ı	1 semester	Method of gradi	ng numerical grad	de	Modul level	undergraduate		
	Course	!S		V + Ü	(no information o	n SWS (weekly cont	act hours) and cou	ırse language av	ailable)			
			essment	specil Asses nounc 2009.	ied) sment offered: W eed in due form ui	hen and how often and how often a	assessment will be Section 32 Subsec	e offered depend tion 3 ASPO (ger	ls on the metho neral academic	. 90 minutes; unless otherwise od of assessment and will be an- and examination regulations)		
	other p	orerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respec- tive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissi- on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as- sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quali- fication for admission to assessment anew.								
11-QAM-092-m01	Quanta	a, Atoms	s, Molecu	les								
	ECTS	8	Duration	1	1 semester	Method of gradi	ng numerical grad	de	Modul level	undergraduate		
	Course	:S		Ü + Ü	(no information o	n SWS (weekly cont	act hours) and cou	ırse language av	vailable)			
	Method of assessment			specif Asses	ied) sment offered: W ed in due form ui	hen and how often a	assessment will be	e offered depend	ls on the metho	. 90 minutes; unless otherwise od of assessment and will be an- and examination regulations)		
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respec- tive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissi- on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as- sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quali- fication for admission to assessment anew.								
Bachelor's with 1 major	Computation	nal Mathem	natics (2013)				JMU Würzburg	• generated 26-Aug-20	024 • exam. reg. data	record 82 f24 - - H 2013 page 40 / 43		

11-QM-092-m01	Quantum Mechanics												
	ECTS	8	Duration	า	1 semester	Method of grading	g numerical grade		Modul level	undergraduate			
	Courses	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			speci	fied)					90 minutes; unless otherwise			
				nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.									
	other p	rerequi	sites	tive d on to the le sessr	letails at the begin assessment. If st ecturer will put the nent in the curren	nning of the course. Re udents have obtained ir registration for asse	egistration for the cou the qualification for a essment into effect. S	urse will be co admission to tudents who	onsidered a de assessment e meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-			
11-ST-092-m01	Statistical Mechanics and Thermodynamics												
	ECTS	8	Duration	า	1 semester	Method of grading	g numerical grade		Modul level	undergraduate			
	Courses	S		V + Ü	(no information o	n SWS (weekly contac	t hours) and course l	anguage ava	ilable)				
	Method of assessment			written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.									
	other prerequisites			tive d on to the le sessr	letails at the begin assessment. If st ecturer will put the nent in the curren	nning of the course. Re udents have obtained ir registration for asse	egistration for the cou the qualification for a essment into effect. S	urse will be co admission to tudents who	onsidered a de assessment e meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-			
11-KET-122-m01	Nuclear	r <mark>and El</mark>	ementary	Partic	le Physics								
	ECTS	6	Duration	า	1 semester	Method of grading	g 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. 120 minutes)									
	other prerequisites			tive d on to the le sessr	letails at the begin assessment. If st ecturer will put the nent in the curren	nning of the course. Re udents have obtained ir registration for asse	egistration for the cou the qualification for a essment into effect. S	urse will be co admission to tudents who	onsidered a de assessment e meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-			

Thesis (11 ECTS cre	dits)											
10-M-BAC-122-m01	Thesis	Compu	tational N	lathen	natics (Bachelor Th	esis)						
	ECTS 11 Duratio		n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
				no co	urses assigned	•		•				
	Method	d of ass		written thesis								
					Language of assessment: German, English if agreed upon with the examiner							
Subject-specific Ke	y Skills	(16 ECT	S credits)									
10-M-MCO-122-		matics a	and Comp	uter								
m01	ECTS	7	Duratio		2 semester			ompleted Modul level	undergraduate			
	Courses			•	 This module comprises 2 module components. Information on courses will be listed separately for each module component. 10-M-COM-1-122: V + Ü (no information on SWS (weekly contact hours) and course language available) 10-M-PRG-1-122: P (no information on SWS (weekly contact hours) and course language available) 							
	Method	d of ass	essment						ts as specified below. Unless f all individual assessments.			
			•	4 ECTS, Method o project in the for beginning of the o Language of asse Other prerequisite students about th a declaration of w assessment over dents who meet a assessment at a l isment in module o 3 ECTS, Method o project in the for beginning of the o Language of asse Other prerequisite students about th a declaration of w assessment over dents who meet a	If grading: (not) success m of programming ex course) ssment: German, Engles: Certain prerequisite respective details a vill to seek admission the course of the sem all prerequisites will b ater date, students wi component 10-M-PRG- f grading: (not) success m of programming ex course) ssment: German, Engles: Certain prerequisite ne respective details a vill to seek admission the course of the sem all prerequisites will b	ssfully completed ercises (type and ex ish if agreed upon wi es must be met to qua it the beginning of th to assessment. If st nester, the lecturer w e admitted to assess Il have to obtain the 1-122: Programming sofully completed ercises (type and ex ish if agreed upon wi es must be met to qua it the beginning of th to assessment. If st nester, the lecturer w e admitted to assess	ith the examiner alify for admission to asse be course. Registration fo udents have obtained the rill put their registration f sment in the current or ir qualification for admissio course for students of Ma penditure of time to be with the examiner alify for admission to asse be course. Registration fo udents have obtained the rill put their registration f	specified by the lecturer at the essment. The lecturer will inform or the course will be considered e qualification for admission to for assessment into effect. Stu- in the subsequent semester. For on to assessment anew. Athematics and other subjects specified by the lecturer at the essment. The lecturer will inform or the course will be considered e qualification for admission to for assessment into effect. Stu- in the subsequent semester. For				
	other prerequisites			By wa	By way of exception, additional prerequisites are listed in the section on assessments.							

Bachelor's with 1 major Computational Mathematics (2013)	JMU Würzburg
--	--------------

Würzburg • generated 26-Aug-2024 • exam. reg. data record 82|f24|-|-|H|2013 page 42 / 43

10-M-MDA-122-	Introduction into mathematical thinking and working											
m01	ECTS 4 Duratio	n 1 semester Method of grading (not) successfully completed Modul level undergraduate										
	Courses	 This module comprises 2 module components. Information on courses will be listed separately for each module component. 10-M-MDA-1-122: V + Ü (no information on SWS (weekly contact hours) and course language available) 10-M-MDA-2-122: 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 10-M-MDA-1-122: Basic Notions and Methods of Mathematical Reasoning Basic Notions and Methods of Mathematical Reasoning 2 ECTS, Method of grading: (not) successfully completed project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) Language of assessment: German, English if agreed upon with the examiner Other prerequisites: Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment in module component 10-M-MDA-2-122: Reasoning and Writing in Mathematics Reasoning and Writing in Mathematics 2 ECTS, Method of grading: (not) successfully completed project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course) Language of assessment: German, English if agreed upon with the examiner Other prerequisites: Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be cons										
	other prerequisites	assessment at a later date, students will have to obtain the qualification for admission to assessment anew. By way of exception, additional prerequisites are listed in the section on assessments.										
	Referred to in LPO I	§ 73 (1) 5. Mathematik Angewandte Mathematik										
10-M-SEM-122-	Seminar Mathematics											
m01	ECTS 5 Duratio	on 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	talk (approx. 60 to 180 minutes) Language of assessment: German, English if agreed upon with the examiner										
	other prerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respec- tive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissi- on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as- sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quali- fication for admission to assessment anew.										
Bachelor's with 1 major	Computational Mathematics (2013)	JMU Würzburg • generated 26-Aug-2024 • exam. reg. data record 82 f24 - - H 2013 page 43 / 43										