

## Module Catalogue

for the Subject

# Biology

## as a minor in a Bachelor's degree programme

(60 ECTS credits)

Examination regulations version: 2015 Responsible: Faculty of Biology

JMU Würzburg • generated 18-Apr-2025 • exam. reg. data record B1|026|-|-|N|2015



## Contents

The subject is divided into	3
Learning Outcomes	4
Abbreviations used, Conventions, Notes, In accordance with	6
Compulsory Courses	7
The Plant Kingdom	8
Evolution and the Animal Kingdom	10
Genetics, Neurobiology, Behaviour	12
Legal and Ethical Aspects in Biological Sciences	14
Developmental Biology of Animals	15
Plant and Animal Ecology	17
Compulsory Electives	19
Mathematical Biology and Biostatistics	20
Developmental Biology of Plants	22
Physiology of Prokaryotes	24
Plant Physiology	25
Animal Physiology	27
Genes, Molecules, Technologies	28
Basic Biochemistry	30
The Flora of Germany	32
The Fauna of Germany	34
Neurobiology 1	36
Integrative Behavioral Biology 1	38
Functional Morphology of Arthropods	40
Basics in Light- and Electron-Microscopy	42
Analysis of Chromosomes	44
Special Bioinformatics 1	46
Molecular modelling - From DNA to Protein	48
Methods in Plant Ecophysiology	50
Pharmaceutical Drugs in Plants	52
Laboratory Practical Course I	54
Excursion	56
Interdisciplinary Project I	58
Excursion II	60
Interdisciplinary Project II	62
Laboratory Practical Course II	64



## The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	30	7
Compulsory Electives	30	19



## **Learning Outcomes**

German contents and learning outcome available but not translated yet.

#### Wissenschaftliche Befähigung

- Die Absolventinnen und Absolventen verstehen die mathematischen, theoretischen und experimentellen Grundlagen der Biologie und können diese anwenden.
- Die Absolventinnen und Absolventen können unter Anleitung Experimente durchführen, analysieren und die erhaltenen Ergebnisse darstellen und bewerten.
- Die Absolventinnen und Absolventen sind in der Lage, naturwissenschaftliche Probleme durch Anwendung der wissenschaftlichen Arbeitsweise und unter Beachtung der Regeln guter wissenschaftlicher Praxis (Dokumentation, Fehleranalyse) zu bearbeiten.
- Die Absolventinnen und Absolventen können ihr Wissen und ihre Erkenntnisse einem Fachpublikum gegenüber darstellen und vertreten.
- Die Absolventinnen und Absolventen können ein gewisses Grundlagenwissen aus Teilgebieten der Biologie abrufen.
- Die Absolventinnen und Absolventen verstehen die wesentlichen Zusammenhänge und Konzepte der einzelnen Teilgebiete der Biologie.
- Die Absolventinnen und Absolventen sind in der Lage, sich mit Hilfe von Fachliteratur in neue Aufgabengebiete einzuarbeiten und zu bewerten.
- Die Absolventinnen und Absolventen besitzen Abstraktionsvermögen, analytisches Denken, Problemlösungskompetenz und die Fähigkeit, komplexe Zusammenhänge zu strukturieren.

#### Befähigung zur Aufnahme einer Erwerbstätigkeit

- Die Absolventinnen und Absolventen können ihr Wissen und ihre Erkenntnisse einem Fachpublikum gegenüber darstellen und vertreten.
- Die Absolventinnen und Absolventen sind in der Lage, konstruktiv und zielorientiert in einem heterogenen Team zusammenzuarbeiten, unterschiedliche und abweichende Ansichten produktiv zur Zielerreichung zu nutzen und auftretende Konflikte zu lösen (Teamfähigkeit).
- Die Absolventinnen und Absolventen können ihre erworbenen Kompetenzen in unterschiedlichen interkulturellen Kontexten und in international zusammengesetzten Teams anwenden.
- Die Absolventinnen und Absolventen sind in der Lage, Probleme und deren Lösungen zielgruppengerecht und auch in einer Fremdsprache aufzubereiten und darzustellen.
- Die Absolventinnen und Absolventen sind in der Lage natur- und biowissenschaftliche Methoden unter Anleitung auf konkrete experimentelle oder theoretische biologische Aufgabenstellungen anzuwenden, Lösungswege zu entwickeln und die Ergebnisse zu interpretieren und zu bewerten.
- Die Absolventinnen und Absolventen kennen die wichtigsten Anforderungen und Arbeitsweisen im industriellen Umfeld sowie in Forschung und Entwicklung.
- Die Absolventinnen und Absolventen sind befähigt, komplexere Probleme zu analysieren und zu lösen und sich sehr schnell auch in weniger vertraute Themenkomplexe einzuarbeiten.

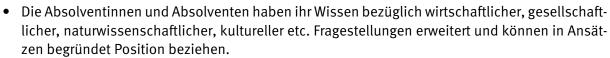
#### Persönlichkeitsentwicklung

- Die Absolventinnen und Absolventen kennen die Regeln guter wissenschaftlicher Praxis und beachten sie.
- Die Absolventinnen und Absolventen können ihr Wissen und ihre Erkenntnisse einem Fachpublikum gegenüber darstellen und vertreten.

#### Befähigung zum gesellschaftlichen Engagement

• Die Absolventinnen und Absolventen können ansatzweise naturwissenschaftliche Entwicklungen kritisch reflektieren und deren Auswirkungen auf die Wirtschaft, Gesellschaft und die Umwelt in Ansätzen erfassen (Technikfolgenabschätzung).

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 4 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	



• Die Absolventinnen und Absolventen entwickeln die Bereitschaft und Fähigkeit, ihre Kompetenzen in partizipative Prozesse einzubringen und aktiv an Entscheidungen mitzuwirken.

Julius-Maxir

UNIVERSITÄT

WÜRZBURG

## Abbreviations used

Course types:  $\mathbf{E}$  = field trip,  $\mathbf{K}$  = colloquium,  $\mathbf{O}$  = conversatorium,  $\mathbf{P}$  = placement/lab course,  $\mathbf{R}$  = project,  $\mathbf{S}$  = seminar,  $\mathbf{T}$  = tutorial,  $\ddot{\mathbf{U}}$  = exercise,  $\mathbf{V}$  = lecture

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

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

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

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

## Conventions

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

### Notes

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

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

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

### In accordance with

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

#### ASPO2015

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

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22-Jul-2015 (2015-37)
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#### 07-Mar-2018 (2018-4)

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.



## **Compulsory Courses**

(30 ECTS credits)

Module title				Abbreviation			
The Pla	nt King	gdom			07-1A1ZPF-152-m01		
Module	e coord	inator		Module offered by			
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology			
ECTS	Metho	od of grading	Only after succ. compl. of module(s)				
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate	exercises (minimum	site to assessment: ( 80%) and successf 5 to 30 hours) are pi	ul completion of the	respective	
Conten	ts						
At the l derstar lutiona biologi cientist	evel of nd the f ry and cal org ts are o	mple of plants, students groups in the plant kingo orms and functions of pl ecological context. The c anisation. Students will a ften required to possess	dom, students will ac ant organisms, with r ontents of the modul also acquire and prac	quire the fundament norphology and cyto e are relevant for bic	al knowledge neces logy being discusse logical disciplines a	sary to un- d in an evo- t all levels of	
		<b>ning outcomes</b> dge of the specific chara					
<ul> <li>A</li> <li>F</li> <li>ii</li> <li>A</li> <li>F</li> <li>F</li> <li>F</li> </ul>	amiliar amiliar n the p bility t amiliar undam	gi. o recognise evolution as ity with the concepts of p ity with the distinguishir lant kingdom. o select those plant and t ity with the components ental skills in the interpre- ental preparation skills.	ohylogenetic relations ng characteristics and fungal organisms tha and functioning of m	ships between plant d major representati t are most suitable f icroscopes.	s/fungi. ves of fungi as well or particular scientif	ic issues.	
Course	<b>S</b> (type, r	number of weekly contact hours, l	language — if other than Ger	man)			
V (1.5)	+ Ü (2.5	5)					
		s <b>essment</b> (type, scope, langua ile for bonus)	ge — if other than German, o	examination offered — if no	t every semester, informat	ion on whether	
written credita		nation (approx. 60 minut bonus	es)				
Allocat	ion of <sub>l</sub>	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teaching cycle							
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module							
Bachel	or's de	gree (1 major) Biology (20	015)				
minor in a l (2015)	Bachelor's	degree programme Biology		urg • generated 18-Apr-2025 • ord Bachelor (60 ECTS) Biolog		page 8 / 65	



Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major, 1 Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 1 minor) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	e title			Abbreviation			
Evoluti	on and	the Animal Kingdom			07-1A1TI-152-m01		
Module	e coord	inator		Module offered by			
holder of the Professorship of Zoology at the Department of Faculty of Biology Electronmicroscopy							
ECTS	Meth	od of grading	Only after succ. con	mpl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites	95			
1 semesterundergraduateAdmission prerequisite to assessment: exercises. Regular atter (minimum 80%) and successful completion of exercises (appr 30 hours) are prerequisites for admission to assessment.		tion of exercises (approx. 25 to					
Conter							

#### Contents

The lecture *Evolution* will acquaint students with fundamental concepts and mechanisms of evolutionary biology: the origins of diversity; natural and sexual selection; speciation; population genetics. It will provide students with an introduction to phylogenetic reconstruction and will thus enable them to develop an understanding of the system of plants and animals. During the exercise, students will complete exercises on mechanistic evolution and evolutionary history. The lecture *Tierreich (Animal Kingdom)* will discuss the diversity of animal organisms on the basis of the phyla of the animal kingdom focusing on phylogenetic criteria. It will address the ecological constraints that led to the development of different types of body plans with their different structures and functions. In this context, the lecture will also develop an awareness in students of how important a knowledge of the fundamental principles of zoology is for research and applications not only but in particular in biology and medicine. In the exercise, students will prepare and/or examine selected species and histological preparations and will thus become familiar with the functional and morphological characteristics of the major multicellular animal phyla. In this context, students will practise working with light microscopes and stereo microscopes and will acquire fundamental preparation skills. They will prepare drawings, documenting and interpreting what they have seen.

#### Intended learning outcomes

Students will be familiar with the fundamental concepts and mechanisms of evolutionary biology and will know that these are key to understanding biological processes. They will have gained an overview of the diversity of animals on the basis of different types of body plans and will understand important structures in both a functional and an ecological context.

**Courses** (type, number of weekly contact hours, language – if other than German)

#### V (2) + Ü (3)

**Method of assessment** (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)

written examination (approx. 60 minutes) creditable for bonus

#### Allocation of places

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#### Additional information

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Workload

150 h

**Teaching cycle** 

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

§ 41 | Nr. 1 (4 ECTS credits) and § 41 | Nr. 4 (1 ECTS credits)

 § 61 | Nr. 1 (4 ECTS credits) and § 61 | Nr. 4 (1 ECTS credits)

 minor in a Bachelor's degree programme Biology (2015)
 JMU Würzburg • generated 18-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2015
 page 10 / 65

#### Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Module	appears in
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Bachelor's degree (1 major) Biology (2015)
Bachelor's degree (1 major) Computer Science (2015)
Bachelor's degree (1 major) Mathematics (2015)
Bachelor's degree (1 major) Computational Mathematics (2015)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)
Bachelor's degree (1 major) Biology (2017)
Bachelor's degree (1 major) Computer Science (2017)
Bachelor's degree (1 major) Computer Science (2019)
Bachelor's degree (1 major) Biology (2021)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
Bachelor's degree (1 major) Biology (2022)
Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022)
Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023)
Bachelor's degree (1 major) Mathematics (2023)
Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)

Modul	e title				Abbreviation	
Geneti	cs, Neu	robiology, Behaviour			07-2A2GENV-152-m	01
Modul	e coord	inator		Module offered by	<u> </u>	
Dean c	of Studi	es Biologie (Biology)		Faculty of Biology		
ECTS	1	od of grading	Only after succ. con			
5	1	rical grade				
Duratio		Module level	Other prerequisites			
	-	undergraduate			exercises. Regular at	tandanca
1 seme	ster	undergraduate		d successful comple	tion of exercises (ap	
Contents						
Fundar	mental	principles of genetics, n	eurobiology and beha	vioural biology.		
Intend	ed lear	ning outcomes				
volved heritar	in anin Ice.	understand that there a nal behaviour and will b	e able to relate anima	l behaviour to the m		
	<b>S</b> (type, r	number of weekly contact hours	, language — If other than Ger —	man)		
V (3)						
module i	s creditab	le for bonus)		examination offered — if no	ot every semester, informati	ion on whether
	examination ble for	nation (approx. 60 to 90 bonus	o minutes) 			
Allocat	tion of <sub>l</sub>	olaces				
			_			
Additio	onal inf	ormation				
Worklo	bad					
150 h						
-	ng cycl	e				
	0.7	2				
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	mmes)		
		ECTS credits)		inites)		
-	•	ECTS credits)				
		ECTS credits)				
Modul	e appea	urs in				
Bachel	lor's de	gree (1 major) Biology (2	2015)			
Bachel	lor's de	gree (1 major) Computer	r Science (2015)			
Bachel	lor's de	gree (1 major) Mathema	tics (2015)			
		gree (1 major) Computat		015)		
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)						
Bachelor's degree (1 major) Biology (2017)						
		gree (1 major) Computer				
		gree (1 major) Computer es (Bachelor) Biology (20	-			
		es (Bachelor) Orientieru	•			
		gree (1 major) Biology (2	-			
ninor in a	Bachelor's	degree programme Biology	JMU Würzbı	urg • generated 18-Apr-2025	• exam.	page 12 / 65
(2015)			reg. data reco	ord Bachelor (60 ECTS) Biolog	gie - 2015	



Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)

minor in a Bachelor's degree programme Biology (2015)

Module	e title				Abbreviation
Legal a	nd Eth	ical Aspects in Biologica	l Sciences		07-SQF-RETH-152-m01
Module	e coord	inator		Module offered by	
Dean of Studies Biologie (Biology)		Faculty of Biology			
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
5 numerical grade					
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	exercises (minimum	80%) and successf	exercises. Regular attendance of ful completion of the respective rerequisites for admission to as-
Conten	ts				
animal	testing		agriculture, biodivers		ch, cloning, transgenic animals, ervation, biotechnology and mi-
Intende	ed lear	ning outcomes			
sity and	d natur	e conservation, biotechn	ology and microbiolo	gy, medicine and ne	gineering in agriculture, biodiver- eurogenetics and are able to eva- n and critically discuss these to-
Course	<b>S</b> (type, 1	number of weekly contact hours, I	anguage — if other than Ger	man)	
V (1) +	Ü (1)				
		<b>sessment</b> (type, scope, langua ble for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
	ige of a	nation (approx. 30 to 60 issessment: German and bonus			
Allocat	ion of	places			
Additio	nal inf	ormation			
			-		
Worklo	ad				
150 h					
Teachi	ng cycl	e	-		
		e: every year, summer se	mester		
		LPOI (examination regulation		mmes)	
Module	e appea	ars in			
		gree (1 major) Biology (20	015)		
Bachel	or's de	gree (1 major, 1 minor) Bi	ology (Minor, 2015)		
		gree (1 major) Biology (20	017)		
exchan	ge pro	gram Biosciences (2022)			

Module title				Abbreviation			
Develo	Developmental Biology of Animals					07-3A3EBIOTI-152-m01	
Module	e coord	inator		Module offered by			
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology			
ECTS Method of grading Only afte		Only after succ. con	npl. of module(s)				
4		rical grade		•			
Duratio		Module level	Other prerequisites				
1 seme		undergraduate			exercises. Regular at	tendance	
1 Senie	5101	undergraduate	(minimum 80%) and		tion of exercises (ap		
Conten	ts						
biology bians, i of sper organo	r. The fo nemato matozo genesia	ollowing topics will be odes, Drosophila, mou oa and ova), differentia	theoretical and practic covered: early embryon se) and relevance for th I gene expression, cell arcinogenesis, stem cel	ic development of va e systematics of ani growth and molecula	arious model organis mals, gametogenesi ar regulation of cell o	sms (amphi- s (production development,	
Intende	ed lear	ning outcomes					
model discipli don, ca	organis nary co incer ai	sms (pattern formation onnections between de nd stem cells as well a	mental biology. 2. Emb ). 3. Molecular mechan evelopmental biology ar s gametes. 6. Interrelat opmental processes di	isms as well as contr nd other branches of ions between ontoge	rol of cell developme biology. 5. Cell biolo	ent. 4. Inter- ogy of cotyle-	
Course	<b>S</b> (type, r	number of weekly contact hou	rs, language — if other than Ger	rman)			
V (1) + Ü	Ü (3)						
		<b>sessment</b> (type, scope, lan le for bonus)	guage — if other than German,	examination offered — if no	ot every semester, informati	on on whether	
written credita		nation (approx. 60 min bonus	utes)				
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
120 h							
Teachi		•					
reactin	is cyci	6					
Referre	d to in	LPOI (examination regulat	ions for teaching-degree progra	immes)			
§ 61   Nr. 5							
Module	e appea	irs in					
Bachelor's degree (1 major) Biology (2015)							
Bachelor's degree (1 major) Mathematics (2015)							
Bachelor's degree (1 major) Biomedicine (2015)							
Bachelor's degree (1 major) Computational Mathematics (2015)							
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017)						
		gree (1 major) Biology gree (1 major) Biomedi					
-		degree programme Biology		Irg • generated 18-Apr-2025 •	• exam.	page 15 / 65	
(2015)				ord Bachelor (60 ECTS) Biolog			

#### Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Bachelor's degree (1 major) Biomedicine (2020) Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	e title				Abbreviation	
Plant and Animal Ecology			07-3A30EK0-152-m	101		
Module	e coord	inator		Module offered by		
Dean o	fStudi	es Biologie (Biology)		Faculty of Biology		
ECTS Method of grading Only after succ. co		Only after succ. com	npl. of module(s)			
6	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	semester undergraduate					
Conten	ts		1			
and bio as on t fundan re the f	otic env he stru nental r undam	vill provide students wi vironments. The module cture and dynamics of nodel concepts of ecol ental knowledge neces	e will focus on the funct oopulations, communit ogy, will become famili	tional adaptation to ties and ecosystems ar with examples of	environmental cond . Students will be int research findings ar	itions as well troduced to nd will acqui-
Intende	ed lear	ning outcomes				
portant	t abioti nvironm	amiliar with the fundar c and biotic factors tha nent. In addition, they u ues.	t influence the distribu	tion and frequency o	of occurrence of orga	nisms in
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ger	man)		
V (2) +	Ü (2)					
		<b>sessment</b> (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	ot every semester, informat	ion on whether
written credita		nation (approx. 90 min bonus	utes)			
Allocat	ion of p	olaces				
Additio	onal inf	ormation				
Worklo	ad					
180 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)		
§ 61   N						
Module		urs in				
		gree (1 major) Biology (	2015)			
		gree (1 major) Geograp	-			
Bachelor's degree (1 major) Computer Science (2015)						
Bachelor's degree (1 major) Mathematics (2015)						
Bachelor's degree (1 major) Computational Mathematics (2015)						
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)						
First state examination for the teaching degree Gymnasium Biology (2015) Bachelor's degree (1 major) Biology (2017)						
	Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Computer Science (2017)					
		gree (1 major) Compute				
minorina	Bacholoric	degree programme Biology	IAILA//3mb.	irg a generated 19 Apr 2005	evam	nage 17 / 6r
(2015)	Dachelors	שבקופי אוסצומוווווי סוטנטצא		urg • generated 18-Apr-2025 o ord Bachelor (60 ECTS) Biolog		page 17 / 65

#### Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) exchange program Biosciences (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Geography (2023) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)



## **Compulsory Electives**

(30 ECTS credits)

Module title				Abbreviation		
Mather	natical	<b>Biology and Biostatist</b>	ics		07-M-BST-152-m01	
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Bioinformatics		Faculty of Biology		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
4		rical grade		•		
Duratio		Module level	Other prerequisites			
1 seme	ster	undergraduate				
	Contents					
	-	principles of the most i		l and statistical mot	hods in biology	
					nous in biology.	
		ning outcomes				<b>C</b> 1:
		have acquired fundame as well as the mathema			, the interpretation of	of readings
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ger	man)		
V (2) +	Ü (2)					
		<b>sessment</b> (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informati	on on whether
written credita		nation (approx. 60 min bonus	utes)			
Allocat	ion of r	places				
Additio	nal inf	ormation				
Additio	nat mi					
 Worklo						
	au					
120 h						
Teachir	ıg cycl	e				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
Module	e appea	urs in				
Bachel	or's de	gree (1 major) Biochem	istry (2015)			
		gree (1 major) Biology (	-			
		gree (1 major) Compute				
		gree (1 major) Mathema				
		gree (1 major) Computa		015)		
		gree (1 major, 1 minor)				
		gree (1 major) Biology (				
Bachelor's degree (1 major) Biochemistry (2017)						
Bachelor's degree (1 major) Computer Science (2017)						
Bachelor's degree (1 major) Computer Science (2019)						
Bachelor's degree (1 major) Biology (2021)						
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)						
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)					
	Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Biochemistry (2022)					
		gree (1 major) Biocnem gree (1 major) Biology (	•			
minor in a E (2015)	Bachelor's	degree programme Biology		rg • generated 18-Apr-2025 • rd Bachelor (60 ECTS) Biolog		page 20 / 65



Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)

Module	e title				Abbreviation	
Developmental Biology of Plants					07-3A3EBIOPF-152-	m01
Module	e coord	inator		Module offered by		
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology		
ECTS		od of grading	Only after succ. com	·		
		rical grade				
4 Duratio		Module level				
			Other prerequisites			
1 seme	ster	undergraduate	Admission prerequis (minimum 80%) and 30 hours) are prerec	d successful comple	tion of exercises (ap	
Conten	ts					
over a	plant's	e, students will acquire entire life cycle from ge gulation of different dev	ermination to reproduct	tion. The module wil	l discuss the molecu	lar determi-
		ning outcomes		· ·	· ·	
ganism nisms u bryonic	is. 3. Do underly caxes.	al concepts in plant dev evelopmental biologica ing pattern formation, r 6. Physiological aspect nental biological proces	l processes at specific morphogenesis and org s of the developmenta	stages in the life cyc ganogenesis in plan l processes in plants	cle of plants. 4. Mole ts. 5. Establishment that were discussed	cular mecha- of plant em-
Course	<b>S</b> (type, r	number of weekly contact hours	s, language — if other than Ger	man)		
V (1) +	Ü (3)					
		<b>sessment</b> (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	t every semester, informat	ion on whether
written credita		nation (approx. 60 mini bonus	utes)			
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
120 h						
Teachi		•				
Teacini	ig cycl	6				
 Deferme				<b>`</b>		
		LPO I (examination regulation	ons for teaching-degree progra	mmes)		
§61 N	_	•				
Module						
		gree (1 major) Biology (	5,			
		gree (1 major) Mathema gree (1 major) Computa		215)		
Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)						
		gree (1 major, 1 minor) a gree (1 major) Biology (1				
		gree (1 major) Biology (				
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)						
		gree (1 major, 1 minor)				
		gree (1 major) Biology (				
minor in a l (2015)	Bachelor's	s degree programme Biology		urg • generated 18-Apr-2025 • ord Bachelor (60 ECTS) Biolog		page 22 / 65



Bachelor's degree (1 major) Mathematics (2023)

Module	e title				Abbreviation
Physio	logy of	Prokaryotes			07-2A2PHYPR-152-m01
Module coordinator				Module offered by	,
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology	
ECTS		od of grading	Only after succ. con	· -·	
4		rical grade		<u>, , , , , , , , , , , , , , , , , , , </u>	
4 Duratio		Module level	Other prerequisites		
1 seme		undergraduate	Admission prerequi	d successful comple	exercises. Regular attendance etion of exercises (approx. 25 to on to assessment.
Conten	ts				
	olism. [	Ouring exercises, fundam			l cell and the versatile bacterial will be illustrated by help of suita-
Intende	ed lear	ning outcomes			
		amiliar with the fundame mental microbiology and		cterial physiology. T	They are familiar with basic techni-
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	rman)	
V (1) + l	Ü (2)				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if n	not every semester, information on whether
written credita		nation (approx. 60 minut bonus	es)		
Allocat	ion of <sub>l</sub>	olaces			
			-		
		ormation			
		take place all day as a b	lock event.		
Worklo	ad				
120 h					
Teachi	ng cycl	e			
Referre	d to in	LPOI (examination regulation	s for teaching-degree progra	mmes)	
§ 61   N	r. 3				
Module	e appea	ars in			
		gree (1 major) Biology (20	-		
		gree (1 major, 1 minor) Bi			
		gree (1 major) Biology (20			
		gree (1 major) Biology (20			
		gree (1 major, 1 minor) Bi	•, ·		
		gree (1 major, 1 minor) Bi			
Bachel	or's de	gree (1 major) Biology (20	022)		

Module title					Abbreviation	
Plant Physiology					07-2A2PHYPF-152-n	101
Module coordinator				Module offered by		
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology		
ECTS	1	od of grading	Only after succ. con	, , ,		
		rical grade				
4 Duratio						
		Module level	Other prerequisites			
1 seme	ster	undergraduate	(minimum 80%) and	site to assessment: d d successful comple quisites for admissio	tion of exercises (ap	
Conten	ts					
opportu the bio nal env general	unity to chemis vironme l princi	develop the fundame stry of the cell and will ent of plants in particul	vith the principles of ge ntal skills for working ir then move on to discus ar. Using the example o module will also elabo ryotes.	n a biological laborat is the physiological p of plants, the module	ory. The module will processes that regula will introduce stude	first address ate the inter- ents to the
Intende	ed lear	ning outcomes				
tors tha skills o	at distir n how t	nguish plant physiolog to perform, analyse an	al processes in plants a y from animal and prok d present scientific exp nental physiological pro	aryotic physiology eriments Essential	Fundamental knowl	edge and
Course	<b>S</b> (type, r	number of weekly contact hou	rs, language — if other than Ger	rman)		
V (1) + l	Ü (2)					
Method	d of ass	<b>Sessment</b> (type, scope, lan le for bonus)	guage — if other than German, d	examination offered — if no	t every semester, informati	on on whether
written credita		nation (approx. 60 min	utes)			
Allocat	-					
Allocal		Jaces				
Additio	nal inf	ormation				
Worklo	ad					
120 h						
Teachi						
	ng cycl	e				
	ng cycl	e				
 Referre			ions for teaching-degree progra	ummes)		
 <b>Referre</b> § 61   N	ed to in		ions for teaching-degree progra	ummes)		
§ 61   N	ed to in	LPOI (examination regulat	ions for teaching-degree progra	ummes)		
§ 61   N Module	ed to in Ir. 2 e appea	LPO I (examination regulat		ummes)		
§ 61   N <b>Module</b> Bachele	ed to in Ir. 2 e appea or's de	LPOI (examination regulat ars in gree (1 major) Biology	(2015)	ımmes)		
§ 61   N Module Bachele Bachele	ed to in Ir. 2 e appea or's de or's de	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem	(2015)			
§ 61   N Module Bachele Bachele Bachele	ed to in Ir. 2 e appea or's de or's de or's de	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem	(2015) atics (2015) ational Mathematics (20			
§ 61   N Module Bachele Bachele Bachele Bachele	ed to in Ir. 2 e appea or's de or's de or's de or's de	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem gree (1 major) Computa	(2015) atics (2015) ational Mathematics (20 Biology (Minor, 2015)			
§ 61   N Module Bachele Bachele Bachele Bachele	ed to in Ir. 2 e appea or's deg or's deg or's deg or's deg or's deg	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem gree (1 major) Computa gree (1 major, 1 minor)	(2015) atics (2015) ational Mathematics (20 Biology (Minor, 2015) (2017)			
§ 61   N Module Bachele Bachele Bachele Bachele Bachele	ed to in Ir. 2 e appea or's de or's de or's de or's de or's de or's de or's de	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem gree (1 major) Comput gree (1 major, 1 minor) gree (1 major) Biology	(2015) atics (2015) ational Mathematics (20 Biology (Minor, 2015) (2017) (2021)			
§ 61   N Module Bachele Bachele Bachele Bachele Bachele Bachele	ed to in Ir. 2 e appea or's de or's de or's de or's de or's de or's de or's de or's de or's de	LPO I (examination regulat ars in gree (1 major) Biology gree (1 major) Mathem gree (1 major) Comput gree (1 major, 1 minor) gree (1 major) Biology gree (1 major) Biology	(2015) atics (2015) ational Mathematics (20 Biology (Minor, 2015) (2017) (2021) Biology (Minor, 2020)			



Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

(2015)

Module	e title				Abbreviation	
Animal Physiology					07-2A2PHYTI-152-m	101
Module	e coord	inator		Module offered by		
Dean o	of Studio	es Biologie (Biology)		Faculty of Biology		
ECTS	1	od of grading	Only after succ. com	, , ,		
		rical grade				
4 Duratio	•	Module level	Other prerequisites			
		-		-:		
1 seme	ster	undergraduate	Admission prerequis (minimum 80%) and 30 hours) are prerec	d successful comple	tion of exercises (ap	
Conten	Its					
provide module	e them e will fo	with an opportunity to	vith the principles of ge develop the fundament ay and sensory physiolo	al skills for working	in a physiological la	boratory. The
Intend	ed lear	ning outcomes				
			anding of the physiolo on planning, setup, int			
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ger	man)		
V (1) +	Ü (2)					
Metho	d of ass	sessment (type, scope, lang	uage — if other than German, e	examination offered — if no	ot everv semester, informat	ion on whether
		le for bonus)				
written	exami	nation (approx. 60 min	utes)			
credita			_			
Allocat	ion of p	olaces				
Additio	onal inf	ormation				
Worklo	ad					
120 h						
Teachi	ng cycl	e				
	3 - )					
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)		
§ 41   N § 61   N	lr. 2					
Module		ars in				
		gree (1 major) Biology (	2015)			
		gree (1 major) Mathema				
			ational Mathematics (20	015)		
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2015)			
		gree (1 major) Biology (				
		gree (1 major) Biology (				
		gree (1 major, 1 minor)				
		gree (1 major, 1 minor) gree (1 major) Biology (				
		gree (1 major) Mathema				
minor in a (2015)	Bachelor's	s degree programme Biology		rg • generated 18-Apr-2025 ord Bachelor (60 ECTS) Biolog		page 27 / 65

Module title					Abbreviation	
Genes,	, Molec	ules, Technologies	07-3A3GEMT-152-m01			
Module	e coord	inator		Module offered by		
Dean of Studies Biologie (Biology)				Faculty of Biology		
ECTS	Meth	od of grading	Only after succ. com	pl. of module(s)		
6	nume	rical grade				
Duration Module level		Module level	Other prerequisites			
1 seme	1 semester undergraduate					
Conten	nts					

The module Gene, Moleküle, Technologien (Genes, Molecules, Technologies) will include lectures on the following topics: The section Spezielle Genetik (Special Genetics) will build on Einführung in die Genetik (Introduction to Genetics) and will deepen the students' knowledge of topics from the following areas: structure and evolution of the eukaryotic genome, regulatory RNA, epigenetically and evolutionarily significant genetic mechanisms. The section will also focus on methods of gene expression profiling, reverse genetics and modern methods of gene function and gene sequence analysis. In the lecture Einführung in die Bioinformatik (Introduction to Bioinformatics), students will acquire an overview of major areas in the field of bioinformatics: protein sequence and protein domain analysis, phylogeny and evolution of sequences, protein structure, RNA/DNA sequences and structures, cellular networks (regulation, metabolism) and systems biology. During the section Einführung in die Biotechnologie (Introduction to Biotechnology), students will acquire an overview of the following topics: history of biotechnology, DNA and RNA technologies, recombinant antibodies, molecular diagnostics, nanobiotechnology, biomaterials, bioprocess engineering, microbial biotechnology, transgenic animals and plants, microfluidics. The lecture Einführung in die Pharmakokinetik (Introduction to Pharmacokinetics) will provide students with an overview of the rational development of drugs and active agents. The module component will discuss an important aspect for biologists in more detail: the optimisation of the pharmacokinetics of small molecules and proteins. Pharmacokinetics describes the uptake, distribution, metabolism and elimination of a drug or xenobiotic in an organism.

#### Intended learning outcomes

Students possess an advanced knowledge on genome evolution and the regulation of gene expression and are familiar with current methods in genetics as well as methods for the analysis of DNA and protein databases. They have acquired an overview of both traditional and modern methods in biotechnology and are familiar with fundamental topics in biotechnology. Students have acquired an overview of the fundamental principles of the development and review of active agents in research, clinical practice and the pharmaceutical industry. They are familiar with methods and technologies in biology and are able to evaluate potential applications of these in research and industry.

Courses (type, number of weekly contact hours, language - if other than German)

V (4)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 minutes) creditable for bonus

#### **Allocation of places**

--

Additional information

--

Workload

180 h

Teaching cycle

--

JMU Würzburg • generated 18-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2015 **Referred to in LPO I** (examination regulations for teaching-degree programmes)

#### Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Computer Science (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Computer Science (2017) Bachelor's degree (1 major) Computer Science (2019) Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) exchange program Biosciences (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)

Module title					Abbreviation		
Basic Biochemistry					07-3A3BC-152-m01		
Module	e coord	inator		Module offered by			
Dean o	f Studi	es Biologie (Biology)		Faculty of Biology			
ECTS	1	od of grading	Only after succ. con	Only after succ. compl. of module(s)			
4		rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster	undergraduate	Admission prerequi exercises (minimum	Admission prerequisite to assessment: exercises. Regular attendance of exercises (minimum 80%) and successful completion of the respective exercises (approx. 25 to 30 hours) are prerequisites for admission to as-			
Conten	ts						
dents v will bee transla formed	with de come fa tion) ai l on sel	eper insights into the r amiliar with fundament nd the biochemistry of ected topics that were	noleküle (Macromolecu nolecular biology and b tal principles of molecu carbohydrates, lipids, j discussed in the lectur oresis, blot, enzyme kir	iochemistry of proka lar biology (replication proteins and nucleic e. The exercise will c	aryotes and eukaryot on, transcription, sp acids. Experiments over practical aspec	tes. Students licing and will be per-	
Intend	ed lear	ning outcomes					
Studen	its are f	familiar with the funda	mental principles of bio	ochemistry.			
	_	number of weekly contact hour	rs, language — if other than Ge	rman)			
V (1) +	Ü (2)						
module is	s creditab	s <b>essment</b> (type, scope, lang ole for bonus) nation (approx. 60 min	guage — if other than German,	examination offered — if no	ot every semester, informat	ion on whether	
credita			lutes)				
Allocat	ion of <sub>l</sub>	places					
Additio	onal inf	ormation					
Worklo	ad						
120 h							
Teachi	ng cvcl	e					
	0.7						
Referre	ed to in	LPO I (examination regulat	ions for teaching-degree progra	ammes)			
	<u></u>						
Module	e appea	ars in					
		gree (1 major) Biology	(2015)				
		gree (1 major) Mathem	-				
Bachel	or's de	gree (1 major) Computa	ational Mathematics (20	015)			
		gree (1 major, 1 minor)					
		gree (1 major) Biology					
		gree (1 major) Biology					
		gree (1 major, 1 minor)					
		gree (1 major, 1 minor) gree (1 major) Biology					
	51 3 UC	Siec (I major) Diology	(2022)				
minor in a (2015)	Bachelor's	s degree programme Biology		urg • generated 18-Apr-2025 ord Bachelor (60 ECTS) Biolog		page 30 / 65	



Bachelor's degree (1 major) Mathematics (2023)

Module title					Abbreviation			
The Flora of Germany					07-4A4FLO-152-mo	1		
Module	coord	inator		Module offered by				
holder o gy	of the (	Chair of Ecophysiology	and Vegetation Ecolo-	Faculty of Biology				
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)				
7	nume	rical grade						
Duratio	n	Module level	Other prerequisites					
1 semester undergraduate		undergraduate	following subjects: Economics) Bachelo tik (Business Inform dits) and Wirtschaft	Modules 12-NW-EBWL and 12-NW-EVWL are not open for students of the following subjects: Wirtschaftswissenschaft (Business Management and Economics) Bachelor's (BSc with 180 ECTS credits), Wirtschaftsinforma- tik (Business Information Systems) Bachelor's (BSc with 180 ECTS cre- dits) and Wirtschaftsmathematik (Mathematics for Economics) Bache- lor's (BSc with 180 ECTS credits).				
Conten	ts							
plants. nomic i dents w learn ho minolog Würzbu will be using fi tion-rel	Studer mporta vill praco ow to id gy. The irg. Stu introdu eld gui evant o the Uni	nts will acquire an over ance. Using a field guid ctise identifying freshly dentify major morpholo module will also inclu dents will become far uced to the family- as w ides and identification characteristics will also versity of Würzburg wi	ental principles of the s view of major indigeno le, the course will demo y-gathered plants using ogical plant characterist de field trips to typical iliar with the common a yell as species-specific keys on site. Habitat eo be discussed. The moo th its outdoor facilities	us plant families as onstrate how dichoto dichotomous keys. tics and will become habitats in the Botan as well as scientific r characteristics of the cological, geobotanic dule will also include	well as their ecologi omous keys are used Identifying plants, si familiar with the res nical Garden and the names of the plants ese plants. Students cal, climatic as well e sessions at the Bo	cal and eco- l, and stu- tudents will spective ter- e vicinity of found and will practise as conserva- tanical Gar-		
Intende	ed lear	ning outcomes						
flowerin	ng plan		and skills related to the ith the terminology of p					
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ger	man)				
V (1) + Ü	Ü (2) +	E (2.5)						
		s <b>essment</b> (type, scope, lang le for bonus)	guage — if other than German, o	examination offered — if no	ot every semester, informat	ion on whether		
1:1	ment o	ffered: Once a year, su	utes) and practical ider mmer semester	tification assignmer	nt (approx. 45 minut	es), weighted		
Allocat	ion of p	olaces						
will be tained a	given p and pla	preferential consideration aces re-allocated by lot	not having successfully on. The remaining plac as they become availa ocated in the same proc	es will be allocated I ble. Places on all co	by lot. A waiting list	will be main-		
Additio	nal inf	ormation						
Worklo	ad							
210 h								
minor in a E (2015)	Bachelor's	degree programme Biology		rg • generated 18-Apr-2025 • ord Bachelor (60 ECTS) Biolog		page 32 / 65		

#### **Teaching cycle**

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

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#### Module appears in

Bachelor's degree (1 major) Biology (2015)

Bachelor's degree (1 major) Geography (2015)

Bachelor's degree (1 major) Mathematics (2015)

Bachelor's degree (1 major) Computational Mathematics (2015)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)

Bachelor's degree (1 major) Biology (2017)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)

Module title					Abbreviation	
The Fau	ina of C	Sermany			07-4A4FAU-152-m01	
Module	coord	inator		Module offered by		
holder	of the (	Chair of Animal Ecology a	nd Tropical Biology	Faculty of Biology		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
7	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	undergraduate	(minimum 80%) and exercises (minimum	Admission prerequisite to assessment: regular attendance of field trips (minimum 80%) and completion of exercises. Regular attendance of exercises (minimum 80%) and successful completion of the respective exercises (approx. 25 to 30 hours) is a prerequisite for admission to assessment		
Conten	ts					
They wi identify specific solidate and bel	ll acqu ring spo c habita e the ki haviou	ire a fundamental knowlecies, using specimens o ats or lifestyles. Exercises	edge of the systemat f animals. Selection s in a variety of habita	ics and taxonomy of of specimens will be ats will provide stude	to be found in Central Europe. these animals and will practise taxon-specific and will represent ents with an opportunity to con- pecimens including their ecology	
		•			classify selected representatives	
of the in Central of spec	ndigen Europe ies, stu	ous fauna (vertebrates, i ean habitats as well as th	nvertebrates) and use neir faunas and phene t the biology and eco	e identification keys. ology. On the basis o logy of these species	They are familiar with selected of the morphology and habitats as well as, where applicable, to	
		umber of weekly contact hours, l	anguage — if other than Ger	rman)		
V (1) + Ü	) (2) +	E (2.5)				
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	t every semester, information on whether	
	examiı	nation (approx. 45 minute	es) and practical ider	tification assignmer	nt (approx. 45 minutes), weighted	
1:1 Δεερεει	ment o	ffered: Once a year, sum	mer semester			
credital		•				
Allocati	ion of p	olaces				
180 pla Should Student siderati ted to s nimum 60 ECTS tik (Mat tentially the nun there be form res ponent ve succ tial con	ces. the nu ts of th ion. Sh tudent of one S credit themat y to stu nber of e, with gulatio that ar essfull siderat	mber of applications exc e Bachelor's degree subj ould the module be used s of the Bachelor's degre place in total) will be allo ts and to students of the ics), each with 180 ECTS idents of other 'importing applications, the remain in one module component of the courses of one of the concerned will be alloc y completed at least one	ect Biologie (Biology I in other subjects, the subject Biologie (B ocated to students of Bachelor's degree su credits, as part of the g' subjects). Should t ing places will be all nt, several courses wi module component. I tated in the same pro other module compo	) with 180 ECTS cred ere will be two quota iology) with 180 ECT the Bachelor's degra bjects Computation application-oriente he number of places ocated to applicants ith a restricted numb n this case, places o cedure. In this proce	es will be allocated as follows: its will be given preferential con- as: 95% of places will be alloca- S credits and 5% of places (a mi- ee subject Biologie (Biology) with al Mathematics and Mathema- d subject Biology (as well as po- available in one quota exceed from the other quota. Should er of places, there will be a uni- n all courses of a module com- edure, applicants who already ha- ve module will be given preferen- ole.	

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 34 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous academic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to their third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

#### Additional information

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Workload

210 h

Teaching cycle

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

#### Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major, 1 Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 1 minor) Biology (2022) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	title				Abbreviation
Neurobiology 1					07-4S1NVO1-152-m01
Module coordinator				Module offered by	
holder	of the (	Chair of Neurobiology and	d Genetics	Faculty of Biology	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5		rical grade			
Duratio		Module level	Other prerequisites		
1 seme		undergraduate			
Conten		undergraduate	<u> </u>		
Neurob	iology	and methods in molecula ehaviour and endogenou		ogenetic model syst	tem Drosophila and humans)
Intende	d lear	ning outcomes			
		e acquired an advanced k nethods in neurobiology.	nowledge of the neu	robiology of a model	l organism and are able to apply
Course	<b>5</b> (type, r	number of weekly contact hours, la	anguage — if other than Ger	man)	
Ü (4) +	S (1)				
		<b>sessment</b> (type, scope, languag le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether
c) oral e d) oral e e) prese f) pract not exc Studen credital	examin examir entatio ical exa eed a r ts will ble for	naximum of 4 hours). be informed about the me bonus	3 candidates (approx tes) or pprox. 2 hours; time to	. 20 minutes per can o complete will vary	according to subject area but will
Allocat	ion of <sub>l</sub>	olaces			
Studen siderati ted to s nimum 60 ECTS tik (Mat tentially the num there b form re ponent ve succ tial con	the nut ts of the fon. She tudent of one S credit themat y to stunder of e, with gulatio that an essfull sidera	e Bachelor's degree subj ould the module be used s of the Bachelor's degre place in total) will be allo ts and to students of the ics), each with 180 ECTS idents of other 'importing applications, the remain in one module componer n for the courses of one r re concerned will be alloc y completed at least one	ect Biologie (Biology) in other subjects, th e subject Biologie (B ocated to students of Bachelor's degree su credits, as part of the g' subjects). Should th ing places will be all nt, several courses wi nodule component. I ated in the same pro other module compo	with 180 ECTS cred ere will be two quota iology) with 180 ECT the Bachelor's degr bjects Computation application-oriente ne number of places ocated to applicants th a restricted numb n this case, places of cedure. In this proce- onent of the respective	es will be allocated as follows: its will be given preferential con- as: 95% of places will be alloca- S credits and 5% of places (a mi- ree subject Biologie (Biology) with al Mathematics and Mathema- ed subject Biology (as well as po- available in one quota exceed from the other quota. Should ber of places, there will be a uni- on all courses of a module com- edure, applicants who already ha- ve module will be given preferen-
Selectio	on prod	ess group 1 (95%): Place	s will primarily be all	ocated according to	the applicants' previous acade- number of ECTS credits they ha-

ve achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 36 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## Additional information

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Workload

150 h

Teaching cycle

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

# Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 2022) Bachelor's degree (1 major) Biology (2022) exchange program Biosciences (2022) Bachelor's degree (1 major) Mathematics (2023) Module title Abbreviation Integrative Behavioral Biology 1 07-4S1NVO2-152-m01 Module coordinator Module offered by holder of the Chair of Behavioral Physiology and Sociobio-Faculty of Biology logy ECTS Method of grading Only after succ. compl. of module(s) numerical grade Duration Module level Other prerequisites 1 semester undergraduate Contents Communication in the animal kingdom, neuroethology and behavioural development, perception and processing of olfactory signals, temporal organisation of behaviour, adaptive feeding behaviour, reproductive behaviour, social behaviour, orientation mechanisms. Intended learning outcomes Students have acquired an advanced knowledge in the area of behavioural biology and are able to deliver presentations on current studies on relevant topics. Courses (type, number of weekly contact hours, language - if other than German) V (2) + S (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (approx. 20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours). Students will be informed about the method and length of the assessment prior to the course. creditable for bonus Allocation of places 20 places. Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential consideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one place in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathematik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as potentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in the same procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preferential consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous acade-

mic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics))

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 38 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

### Additional information

Workload

150 h

Teaching cycle

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 2022) Bachelor's degree (1 major) Biology (2022) exchange program Biosciences (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	title				Abbreviation
Functional Morphology of Arthropods			07-4S1NVO3-152-m01		
Module	coord	inator		Module offered by	
holder	of the C	Chair of Animal Ecology a	nd Tropical Biology	Faculty of Biology	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate			
Conten	ts				
Morpho	ology, a	natomy, phylogeny and e	ecology of arthropods	5.	
Intende	ed learn	ning outcomes			
		ble to explain arthropod ecosystems.	radiations in a functi	onal context as well	as to explain the importance of
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (1) + Ü	(5) ز				
		e <b>essment</b> (type, scope, langua <sub>)</sub> le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
term pa credita		oprox. 5 to 10 pages) bonus			
Allocat	ion of p	olaces			
Studen siderati ted to s nimum 60 ECTS tik (Mat tentiall the num there b form re ponent ve succ tial con A waitin Selection mic ach ve achi in the s at the t average to their will be Among se by lo	the nu ts of th ion. Sh tudent of one S credit themat y to stu nber of e, withi gulatio that ar essfull siderat ng list v on proc nievem eved an ubject ime of e grade total n calcula applica	e Bachelor's degree subj ould the module be used s of the Bachelor's degre place in total) will be allo ts and to students of the ics), each with 180 ECTS dents of other 'importing applications, the remain in one module componer n for the courses of one r e concerned will be alloc y completed at least one tion. will be maintained and pl tess group 1 (95%): Place ents. For this purpose, ap nd their average grade of of Biologie (Biology) (exc application. This will be of weighted according to th umber of ECTS credits ac ted as the sum of these t ants with the same rankin	ect Biologie (Biology) in other subjects, the subject Biologie (B bocated to students of Bachelor's degree su credits, as part of the g' subjects). Should the ing places will be all of, several courses wi nodule component. I ated in the same pro- other module component aces re-allocated as the swill primarily be all oplicants will be rank all assessments take cluding Chemie (Chemi done as follows: First, ne number of ECTS cre- hieved (quantitative two rankings, and pla- ng, places will be allocated so and places will be allocated so and places will be allocated and places will be allocated	with 180 ECTS cred ere will be two quota iology) with 180 ECTS the Bachelor's degre bjects Computationa application-oriente ne number of places ocated to applicants th a restricted numb n this case, places of cedure. In this proce- onent of the respective they become available ocated according to the re- en during their studie nistry), Physik (Physis applicants will be ra- edits (qualitative ran ranking). The applica- ces will be allocated ocated according to the	es will be allocated as follows: its will be given preferential con- as: 95% of places will be alloca- S credits and 5% of places (a mi- ee subject Biologie (Biology) with al Mathematics and Mathema- d subject Biology (as well as po- available in one quota exceed from the other quota. Should ber of places, there will be a uni- on all courses of a module com- edure, applicants who already ha- ve module will be given preferen- ble. the applicants' previous acade- number of ECTS credits they ha- es or of all module components ics), Mathematik (Mathematics)) anked, firstly, according to their oliging and, secondly, according ants' position in a third ranking d according to this third ranking. the qualitative ranking or otherwi-
ces): to	tal nun	nber of ECTS credits alrea	ady achieved in modu	iles/module compor	nents of the Faculty of Biology; e allocated by lot. Quota 2 (25 %

of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## Additional information

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Workload

150 h

### **Teaching cycle**

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015)

Bachelor's degree (1 major) Mathematics (2015)

Bachelor's degree (1 major) Computational Mathematics (2015)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)

Bachelor's degree (1 major) Biology (2017)

Bachelor's degree (1 major) Biology (2021)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)

Bachelor's degree (1 major) Biology (2022)

Module title				Abbreviation		
Basics in Light- and Electron-Microscopy					07-4S1MZ1-152-m01	
Module	e coord	inator		Module offered by		
head o	f the De	epartment of Electronmic	roscopy	Faculty of Biology		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Fundar	nental	principles of confocal las	er scanning microsco	py and electron mic	roscopy.	
Intende	ed lear	ning outcomes				
Studen	ts have	e acquired theoretical kno	owledge and practica	l skills in the area of	light and electron microscopy.	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V (1) +	Ü (5)					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	t every semester, information on whether	
written credita		nation (approx. 30 to 60 bonus	minutes)			
Allocat	ion of p	olaces				
Should Studen siderat ted to s nimum 60 ECT tik (Ma	Allocation of places 18 places. Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential con- sideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be alloca- ted to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a mi- nimum of one place in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathema- tik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as po- tentially to students of other 'importing' subjects). Should the number of places available in one quota exceed					

the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in the same procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preferential consideration.

A waiting list will be maintained and places re-allocated as they become available.

Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous academic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to the sthird ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 42 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## Additional information

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Workload

150 h

# Teaching cycle

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

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# Module appears in

Bachelor's degree (1 major) Biology (2015)
Bachelor's degree (1 major) Mathematics (2015)
Bachelor's degree (1 major) Nanostructure Technology (2015)
Bachelor's degree (1 major) Computational Mathematics (2015)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)
Bachelor's degree (1 major) Biology (2017)
Bachelor's degree (1 major) Nanostructure Technology (2020)
Bachelor's degree (1 major) Biology (2021)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)
Bachelor's degree (1 major) Quantum Technology (2021)
Bachelor's degree (1 major) Biology (2022)
exchange program Biosciences (2022)

minor in a Bachelor's degree programme Biology	
(2015)	

Module title				Abbreviation	
Analysis of Chromosomes				07-4S1MZ2-152-m01	
Module coordinator Module offered				Module offered by	
head of	f the De	epartment of Electronmic	roscopy	Faculty of Biology	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	undergraduate			
Conten	ts				
Overvie	w of th	e structure of chromosor	nes of somatic and m	neiotic cells.	
Intende	ed learı	ning outcomes			
Studen	ts are a	able to analyse chromoso	mal structures.		
Courses	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (1) + Ü	(5) ز				
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
written examination (approx. 30 to 60 minutes) creditable for bonus					
Allocati	ion of p	olaces			
18 plac	18 places.				

Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential consideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one place in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathematik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as potentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in the same procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preferential consideration.

A waiting list will be maintained and places re-allocated as they become available.

Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous academic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to the sthird ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 44 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

# Additional information

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Workload

150 h

### Teaching cycle

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)

Module title				Abbreviation
Special Bioinf	formatics 1			07-4S1MZ6-152-m01
Module coordinator			Module offered by	
holder of the	Chair of Bioinformatics		Faculty of Biology	
ECTS Metho	od of grading	Only after succ. com	pl. of module(s)	
<u> </u>	rical grade			
Duration	Module level	Other prerequisites		
1 semester	undergraduate			
	ciples of evolutionary bio			ics (methods and markers), fun- structure prediction, phylogene-
Intended lear	ning outcomes			
Students are a netic reconstr		databases for sequer	nce analysis, RNA str	ructure prediction and phyloge-
Courses (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V (1) + Ü (5)				
Method of ass module is creditab		ge — if other than German, e	examination offered — if no	t every semester, information on whether
	o to 20 pages) ssessment: German or Ei bonus	nglish		
Allocation of	places			
20 places. Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential consideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one place in total) will be allocated to students of the Bachelor's degree subjects Computational Mathematics and Mathema- tik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as po- tentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uni- form regulation for the courses of one module component. In this case, places on all courses of a module com- ponent that are concerned will be allocated in the same procedure. In this procedure, applicants who already ha- ve successfully completed at least one other module component of the respective module will be given preferen- tial consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the number of ECTS credits they ha- ve achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits achieved (quantitative ranking). The applicants'				

# UNIVERSITÄT WÜRZBURG

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

### Additional information

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Workload

150 h

Teaching cycle

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Nanostructure Technology (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Nanostructure Technology (2020) Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Quantum Technology (2021) Bachelor's degree (1 major) Biology (2022) exchange program Biosciences (2022) Bachelor's degree (1 major) Mathematics (2023)

Module title			Abbreviation		
Molecular modelling - From DNA to Protein			07-4S1PS1-152-m01		
Module coordinator Mo			Module offered by		
holder	of the (	Chair of Plant Physiology	and Biophysics	Faculty of Biology	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5		rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate			
Conten					
	s as we	ell as on the search for ar			function of nucleic acids and molecules using databases and
Intende	ed lear	ning outcomes			
		e acquired a specialist kn rk with relevant database		ture-function relatior	nships of macromolecules and
Course	<b>S</b> (type, r	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (1) +	Ü (5)				
		s <b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
compu <sup>.</sup> credita		practical examination (a bonus	pprox. 6 hours)		
Allocat	ion of p	olaces			
18 places. Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential consideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one place in total) will be allocated to students of the Bachelor's degree subject S degree subjects Computational Mathematics and Mathematik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as potentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in the same procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preference.					
Selection mic ach ve achi in the s at the t average to their will be Among se by lo Selection	tial consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous acade- mic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they ha- ve achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwi- se by lot. Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of pla- ces): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology;				

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 48 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## **Additional information**

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Workload

150 h

## Teaching cycle

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

# Module appears in

Bachelor's degree (1 major) Biology (2015)

Bachelor's degree (1 major) Computational Mathematics (2015)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)

Bachelor's degree (1 major) Biology (2017)

Bachelor's degree (1 major) Biology (2021)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)

Bachelor's degree (1 major) Biology (2022)

Module title			Abbreviation		
Methods in Plant Ecophysiology				07-4S1PS2-152-m01	
Module	coord	inator		Module offered by	
holder	of the Q	Chair of Plant Physiology	and Biophysics	Faculty of Biology	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	undergraduate			
Conten	ts				
		riments to introduce stuc perimental findings in a co			ant ecophysiology as well as dis-
Intende	d lear	ning outcomes			
		ble to use current metho in a scientific context.	ds in plant ecophysio	ology as well as to de	ocument experimental findings
Courses	<b>5</b> (type, n	umber of weekly contact hours, la	anguage — if other than Ger	man)	
Ü (4) + 9	S (1)				
		s <b>essment</b> (type, scope, langua) le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
Log (ap credital	•	o to 20 pages) bonus			
Allocati	ion of p	olaces			
Allocation of places 15 places. Should the number of applications exceed the number of available places, places will be allocated as follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferential con- sideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be alloca- ted to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a mi- nimum of one place in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathema- tik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as po- tentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uni- form regulation for the courses of one module component. In this case, places on all courses of a module com- ponent that are concerned will be allocated in the same procedure. In this procedure, applicants who already ha- ve successfully completed at least one other module component of the respective module will be given preferen- ticl applications					
A waitin Selection mic ach ve achion in the s at the tin average to their will be o	tial consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous acade- mic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they ha- ve achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwi-				

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 %

minor in a Bachelor's degree programme Biology	JMU Würzburg • generated 18-Apr-2025 • exam.	page 50 / 65
(2015)	reg. data record Bachelor (60 ECTS) Biologie - 2015	

of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## **Additional information**

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Workload

150 h

### Teaching cycle

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015)

Bachelor's degree (1 major) Mathematics (2015)

Bachelor's degree (1 major) Computational Mathematics (2015)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)

Bachelor's degree (1 major) Biology (2017)

Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)

Module	title				Abbreviation	
Pharmaceutical Drugs in Plants 07-4S1PS3-15			07-4S1PS3-152-m01			
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Pharmaceutical B	Biology	Faculty of Biology		
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5		rical grade		-		
Duratio		Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts	U U				
cals as	well as		harmacy. Microscopie	c and phytochemical	al plants and phytopharmaceuti- l analyses will be performed and ed.	
Intende	ed learı	ning outcomes				
		e acquired a specialist kn s on the requirements and		•	l plants and phytopharmaceuti- eia.	
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
Ü (4) +	S (1)					
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
c) oral e d) oral e e) prese f) pract not exc	examin examin entatio ical exa eed a r ts will l	naximum of 4 hours). be informed about the mo	3 candidates (approx tes) or pprox. 2 hours; time to	. 20 minutes per can o complete will vary	according to subject area but will	
Allocat						
15 place Should Studen siderati ted to s nimum 60 ECTS tik (Mat tentiall the num there b form re ponent ve succ	es. the nu ts of th ion. Sh itudent of one S credit themat y to stu nber of e, with gulatio that ar essfull	mber of applications exc e Bachelor's degree subj ould the module be used s of the Bachelor's degre place in total) will be allo ts and to students of the ics), each with 180 ECTS idents of other 'importing applications, the remain in one module componer n for the courses of one r re concerned will be alloc y completed at least one	ect Biologie (Biology I in other subjects, the subject Biologie (B ocated to students of Bachelor's degree su credits, as part of the g' subjects). Should the ing places will be all nt, several courses wi module component. I tated in the same pro	) with 180 ECTS cred ere will be two quota iology) with 180 ECT the Bachelor's degr bjects Computation application-oriente he number of places ocated to applicants th a restricted numb n this case, places o cedure. In this proce	es will be allocated as follows: its will be given preferential con- as: 95% of places will be alloca- S credits and 5% of places (a mi- ee subject Biologie (Biology) with al Mathematics and Mathema- ed subject Biology (as well as po- available in one quota exceed s from the other quota. Should ber of places, there will be a uni- on all courses of a module com- edure, applicants who already ha- ve module will be given preferen-	
A waitir Selectio mic ach ve achi	ve successfully completed at least one other module component of the respective module will be given preferen- tial consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous acade- mic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they ha- ve achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics))					

at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their

average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.

Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50 % of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25 % of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25 % of places): lottery.

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

## Additional information

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Workload

150 h

Teaching cycle

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

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## Module appears in

Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major, 1 minor) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	titla				Abbreviation		
Laboratory Practical Course I     07-S1-LP1-152-m01							
Laporal							
Module coordinator			Module offered by				
Coordir	nator B	ioCareers		Faculty of Biology			
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
5		rical grade					
Duratio		Module level	Other prerequisites				
1 semes		undergraduate	Please consult with		vice in advance		
Conten		undergraduate	T teuse consult with	course advisory serv			
		coursed is offered by a	in institution that is par	t of the University C	antanto ta ha datarn	ningd by the	
		titution.	in institution that is par	t of the oniversity. C	ontents to be detern	illieu by the	
		ning outcomes					
			h qualify them to work	in their profession			
		· · ·	· _ ·	·			
	<b>5</b> (type, r	number of weekly contact hour	rs, language — if other than Ger	man)			
P (5) Module	taugh	t in: German and/or Er	nglich				
			guage — if other than German,	avamination offered if no	t avant competer informati	ion on whathar	
		le for bonus)	guage — II other than German,	examination onered — in no	n every semester, monnati	on on whether	
		mination (approx. 45 to	o 60 minutes) or				
		. 10 to 20 pages) or					
c) oral e	examin	ation of one candidate	e each (approx. 30 minu				
			o 3 candidates (approx	. 20 minutes per can	ididate) or		
		n (approx. 20 to 30 mi					
		amination (on average naximum of 4 hours).	approx. 2 hours; time t	o complete will vary	according to subject	area but will	
			method and length of t	he assessment prior	to the course		
credital				ne assessment phot	to the course.		
Allocati							
Additio	nal inf	ormation					
Additio	Παι ΠΠ						
Worklo	- d						
	au						
150 h							
Teachir	ig cycl	e					
Referre	d to in	LPO I (examination regulat	ions for teaching-degree progra	mmes)			
Module	e appea	ars in					
Bachelo	or's de	gree (1 major) Biology	(2015)				
Bachelor's degree (1 major) Mathematics (2015)							
Bachelor's degree (1 major) Computational Mathematics (2015)							
		gree (1 major, 1 minor)					
		gree (1 major) Biology					
	Bachelor's degree (1 major) Biology (2021)						
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)						
		gree (1 major, 1 minor)					
		gree (1 major) Biology					
minor in a E (2015)	bachelor's	s degree programme Biology		rg • generated 18-Apr-2025 • ord Bachelor (60 ECTS) Biolog		page 54 / 65	



Bachelor's degree (1 major) Mathematics (2023)

Module title Abbreviation							
<b>Excursion I</b> 07-S1-Ex1-152-m01							
Module	e coord	inator		Module offered by			
Coordi	nator B	ioCareers		Faculty of Biology			
ECTS		od of grading	Only after succ. con	· · ··			
5		rical grade					
Duratio		Module level	Other prerequisites				
1 seme		undergraduate		course advisory serv	vice in advance		
Conten		undergraduate	Theuse consult with				
		e field trip to be deter	nined by the respective	institution			
		ning outcomes		institution.			
	-		h qualify them to work	in their profession			
		· · ·		·			
	S (type, r	number of weekly contact hour	rs, language — if other than Ge	rman)			
E (2) Module	e taugh	t in: German and/or Er	iglish				
			guage — if other than German,	examination offered — if no	ot every semester, informati	ion on whether	
		le for bonus)					
		mination (approx. 45 to . 10 to 20 pages) or	o 60 minutes) or				
			e each (approx. 30 minu	ıtes) or			
			o 3 candidates (approx	. 20 minutes per car	ididate) or		
		n (approx. 20 to 30 mi				h	
		naximum of 4 hours).	approx. 2 hours; time t	o complete will vary	according to subject	t area but will	
			method and length of t	he assessment prior	to the course.		
	ble for						
Allocat	tion of p	olaces					
Additio	onal inf	ormation					
Worklo	ad						
150 h							
Teachi	ng cycl	e					
Referre	ed to in	LPO I (examination regulation	ions for teaching-degree progra	ammes)			
Module	e appea	urs in					
Bachelor's degree (1 major) Biology (2015)							
Bachel	Bachelor's degree (1 major) Mathematics (2015)						
Bachelor's degree (1 major) Computational Mathematics (2015)							
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)						
		gree (1 major) Biology					
		gree (1 major) Biology (					
1		gree (1 major, 1 minor)					
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Biology (2022)						
1 Bachet		B. Se (1 major) biology	()				
minor in a (2015)	Bachelor's	degree programme Biology		urg • generated 18-Apr-2025 ord Bachelor (60 ECTS) Biolog		page 56 / 65	



Bachelor's degree (1 major) Mathematics (2023)

Module	e title				Abbreviation	
Interdisciplinary Project I 07-S1-IP1-152-m01						
		· ·				
Module coordinator Coordinator BioCareers				Module offered by		
_	1			Faculty of Biology		
ECTS		od of grading	Only after succ. com	ipl. of module(s)		
5		rical grade				
Duratio		Module level	Other prerequisites			
1 seme		undergraduate	Please consult with	course advisory serv	/ice in advance.	
Conten		• • • • • • •				
			ned by the competent	coordinators; conter	its will vary accordin	g to topic.
		ning outcomes				
			h qualify them to work	•		
	<b>S</b> (type, n	umber of weekly contact hour	s, language — if other than Ger	man)		
R (5) Module	e taugh	t in: German and/or En	glish			
Metho	d of ass	<b>sessment</b> (type, scope, lang	uage — if other than German, e	examination offered — if no	ot every semester, informat	ion on whether
		le for bonus)				
		mination (approx. 45 to . 10 to 20 pages) or	60 minutes) or			
			each (approx. 30 minu	tes) or		
d) oral	examin	ation in groups of up t	o 3 candidates (approx		ididate) or	
		n (approx. 20 to 30 mi				
		naximum of 4 hours).	approx. 2 hours; time t	o complete will vary	according to subject	t area but will
			method and length of t	he assessment prior	to the course.	
credita						
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)		
Module						
Bachelor's degree (1 major) Biology (2015)						
Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Computational Mathematics (2015)						
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2015)						
		gree (1 major) Biology (				
		gree (1 major) Biology (				
		gree (1 major, 1 minor)				
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2021)			
Bachel	or's de	gree (1 major) Compute	er Science und Sustaina	bility (2021)		
minor in a l	Bachelor's	degree programme Biology	JMU Würzbu	rg • generated 18-Apr-2025 •	• exam.	page 58 / 65
(2015)			reg. data reco	rd Bachelor (60 ECTS) Biolog	gie - 2015	



Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)

Module title Abbreviation							
<b>Excursion II</b> 07-S2-EX2-152-m01							
Module coordinator				Module offered by			
Coordinator BioCareers				Faculty of Biology			
ECTS		od of grading	Only after succ. con				
10		rical grade					
Duratio		Module level	Other prerequisites				
1 seme		undergraduate		course advisory serv	vico in advanco		
Conten		undergraduate	Flease consult with	course advisory serv			
		- field twin to be determ		in atitutian			
			nined by the respective	institution.			
		ning outcomes					
Studen	ts have	e developed skills whic	h qualify them to work	in their profession.			
Course	<b>S</b> (type, r	number of weekly contact hour	rs, language — if other than Ger	rman)			
E (8) Module	e taugh	t in: German and/or Er	nglish				
		<b>Sessment</b> (type, scope, lang ole for bonus)	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether	
b) log ( c) oral o d) oral e) preso f) pract not exc Studen	<ul> <li>a) written examination (approx. 45 to 60 minutes) or</li> <li>b) log (approx. 10 to 20 pages) or</li> <li>c) oral examination of one candidate each (approx. 30 minutes) or</li> <li>d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or</li> <li>e) presentation (approx. 20 to 30 minutes) or</li> <li>f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours).</li> <li>Students will be informed about the method and length of the assessment prior to the course.</li> <li>Language of assessment: German and/or English</li> </ul>						
Allocat							
Additio	nal inf	ormation					
Auditio	inat init	ormation					
Worklo	- d						
	au						
300 h							
Teachi	ng cycl	e					
			_				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	e appea	ars in					
Bachel	or's de	gree (1 major) Biology	(2015)				
Bachelor's degree (1 major) Mathematics (2015)							
Bachelor's degree (1 major) Computational Mathematics (2015)							
		gree (1 major, 1 minor)					
		gree (1 major) Biology					
Bachelor's degree (1 major) Biology (2021) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)							
	Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020) Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)						
		gree (1 major, 1 minor) gree (1 major) Biology					
		s degree programme Biology	· · ·	urg • generated 18-Apr-2025 •	exam.	page 60 / 65	
(2015)			reg. data reco	ord Bachelor (60 ECTS) Biolog	sie - 2015		



exchange program Biosciences (2022) Bachelor's degree (1 major) Mathematics (2023)

Module	e title				Abbreviation	
Interdi	sciplina	ary Project II			07-S2-IP2-152-m01	
Module coordinator				Module offered by		
Coordinator BioCareers Faculty of Biology						
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
10		rical grade		•		
Duratio		Module level	Other prerequisites			
1 seme		undergraduate		course advisory serv	vice in advance	
Conten		undergraduate	Trease consult with			
		a praiact to be determ	inad by the competent.	coordinators, contor	te will von accordin	a to topic
			ined by the competent		its will vary accordin	
		ning outcomes				
Studen	ts have	e developed skills whic	h qualify them to work	in their profession.		
Course	<b>S</b> (type, r	number of weekly contact hou	rs, language — if other than Ger	rman)		
R (8) Module	e taugh	t in: German and/or Er	iglish			
		<b>Sessment</b> (type, scope, lang le for bonus)	guage — if other than German, o	examination offered — if no	ot every semester, informat	ion on whether
b) log ( c) oral o d) oral e) preso f) pract not exc Studen	approx examin examir entatio ical exa eed a r ts will ge of a	ation in groups of up t n (approx. 20 to 30 mi amination (on average naximum of 4 hours). be informed about the ssessment: German a	e each (approx. 30 minu o 3 candidates (approx nutes) or approx. 2 hours; time t method and length of t	. 20 minutes per can o complete will vary	according to subject	t area but will
Allocat	-					
Allocat		Jaces				
Additio	nat inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	е				
Referre	d to in	LPOI (examination regulat	ions for teaching-degree progra	mmes)		
Module	e appea	urs in				
		gree (1 major) Biology	(2015)			
		gree (1 major) Mathem				
			ational Mathematics (20	015)		
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2015)	-		
Bachel	or's de	gree (1 major) Biology	(2017)			
Bachel	or's de	gree (1 major) Biology	(2021)			
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2020)			
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2021)			
		gree (1 major) Biology				
minor in a E (2015)	Bachelor's	degree programme Biology		irg • generated 18-Apr-2025 • ord Bachelor (60 ECTS) Biolog		page 62 / 65



exchange program Biosciences (2022) Bachelor's degree (1 major) Mathematics (2023)

Module title				Abbreviation		
Labora	Laboratory Practical Course II   07-S2-LP2-152-m01					
Module coordinator				Module offered by		
Coordi	nator B	ioCareers		Faculty of Biology		
ECTS Method of grading Only after succ. compl. of module(s)						
10	1	rical grade		, ,,		
Duratio		Module level	Other prerequisites			
1 seme		undergraduate		course advisory serv	vice in advance	
Conter		undergraduate		course advisory serv		
			n in stitution that is non	t of the old with one in the		a in a d bu tha
		titution.	n institution that is par	t of the University. C	ontents to be determ	nned by the
Intend	ed lear	ning outcomes				
		amiliar with the structu profession.	ures of internal instituti	ons and have develo	oped skills which qua	alify them to
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Gei	man)		
P (8)						
Modul	e taugh	t in: German and/or En	glish			
Metho	d of ass	<b>sessment</b> (type, scope, lang	guage — if other than German,	examination offered — if no	ot every semester, informati	ion on whether
	-	le for bonus) mination (approx. 45 to				
c) oral d) oral e) pres f) pract not exc Studer Langua credita	examin examir entatio tical exa ceed a r nts will age of a ble for	nation in groups of up t n (approx. 20 to 30 min amination (on average naximum of 4 hours). be informed about the ssessment: German ar bonus	approx. 2 hours; time t method and length of t	. 20 minutes per car o complete will vary	according to subject	t area but will
Allocat	tion of p	olaces				
	_					
Additio	onal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)		
Module appears in						
Bachelor's degree (1 major) Biology (2015)						
Bachelor's degree (1 major) Mathematics (2015)						
Bachel	or's de	gree (1 major) Computa	ational Mathematics (20	015)		
Bachel	or's de	gree (1 major, 1 minor)	Biology (Minor, 2015)			
Bachel	or's de	gree (1 major) Biology (	(2017)			
		gree (1 major) Biology (				
-		gree (1 major, 1 minor)				
minor in a (2015)	Bachelor's	s degree programme Biology		urg • generated 18-Apr-2025 o ord Bachelor (60 ECTS) Biolog		page 64 / 65



Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021) Bachelor's degree (1 major) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)