



Module Catalogue

for the Subject

Biology

as a minor in a Bachelor's degree programme

(60 ECTS credits)

Examination regulations version: 2021
Responsible: Faculty of Biology

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	26
Plant and Animal Ecology	28
Compulsory Electives	30
Structure and Function of Cells	31
Mathematical Biology and Biostatistics	33
Developmental Biology of Plants	35
Physiology of Prokaryotes	37
Plant Physiology	38
Ecology and Developmental Biology of Marine Organisms	40
Excursion on the Ecology and Faunistics of Terrestrial Ecosystems of the Temperate Zone	42
Excursion on the Ecology and Faunistics of a Tropical Ecosystem	44
Ecology and Nature Conservation	46
Evolutionary Ecology	48
Ecological Modelling	50
Nature Conservation Biology	52
Tropical Biology	54
Methods in Biotechnology	56
Aspects of Molecular Biotechnology	58
Biology and Ecology of Arthropods	60
Biology and Ecology of Arthropods	62
Animal Physiology	64
Genes, Molecules, Technologies	65
Basic Biochemistry	67
The Flora of Germany	69
The Fauna of Germany	71
Neurobiology 1	73
Integrative Behavioral Biology 1	75
Analysis of Chromosomes	77
Special Bioinformatics 1	79
Molecular modelling - From DNA to Protein	81
Methods in Plant Ecophysiology	83
Pharmaceutical Drugs in Plants	85
Laboratory Practical Course I	87
Excursion I	89
Interdisciplinary Project I	91
Excursion II	93
Interdisciplinary Project II	95
Laboratory Practical Course II	97

The subject is divided into

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

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).

- Die Absolventinnen und Absolventen haben ihr Wissen bezüglich wirtschaftlicher, gesellschaftlicher, naturwissenschaftlicher, kultureller etc. Fragestellungen erweitert und können in Ansätzen begründet Position beziehen.
- Die Absolventinnen und Absolventen entwickeln die Bereitschaft und Fähigkeit, ihre Kompetenzen in partizipative Prozesse einzubringen und aktiv an Entscheidungen mitzuwirken.

Abbreviations used

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

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

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

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

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

Conventions

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)):

10-Mar-2021 (2021-16)

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 Plant Kingdom		07-1A1ZPF-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	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 assessment.
Contents		
<p>Using the example of plants, students will be introduced to the phylogenetic diversity of eukaryotes in particular. At the level of groups in the plant kingdom, students will acquire the fundamental knowledge necessary to understand the forms and functions of plant organisms, with morphology and cytology being discussed in an evolutionary and ecological context. The contents of the module are relevant for biological disciplines at all levels of biological organisation. Students will also acquire and practise some of the fundamental preparation skills bioscientists are often required to possess.</p>		
Intended learning outcomes		
<ul style="list-style-type: none"> • Knowledge of the specific characteristics of the intracellular and extracellular structures of plant cells and fungi. • Ability to recognise evolution as the driving force behind the phylogeny of species. • Familiarity with the concepts of phylogenetic relationships between plants/fungi. • Familiarity with the distinguishing characteristics and major representatives of fungi as well as groups in the plant kingdom. • Ability to select those plant and fungal organisms that are most suitable for particular scientific issues. • Familiarity with the components and functioning of microscopes. • Fundamental skills in the interpretation of macroscopic and histologic preparations by light microscopy. • Fundamental preparation skills. 		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1.5) + Ü (2.5)		
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		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
--		
Module appears in		
Bachelor's degree (1 major) Biology (2015)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 8 / 98

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

Module title		Abbreviation
Evolution and the Animal Kingdom		07-1A1TI-152-m01
Module coordinator		Module offered by
holder of the Professorship of Zoology at the Department of Electronmicroscopy		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
<p>The lecture <i>Evolution</i> 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 <i>Tierreich (Animal Kingdom)</i> 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.</p>		
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		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 41 I Nr. 1 (4 ECTS credits) and § 41 I Nr. 4 (1 ECTS credits) § 61 I Nr. 1 (4 ECTS credits) and § 61 I Nr. 4 (1 ECTS credits)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 10 / 98

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)
 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
Genetics, Neurobiology, Behaviour		07-2A2GENV-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
Fundamental principles of genetics, neurobiology and behavioural biology.		
Intended learning outcomes		
Students will understand that there are molecular, cellular and system biological mechanisms and processes involved in animal behaviour and will be able to relate animal behaviour to the molecular and formal bases of inheritance.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (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 to 90 minutes) creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 2 (2 ECTS credits) § 61 I Nr. 3 (1 ECTS credits) § 61 I Nr. 4 (1 ECTS credits)		
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) Module studies (Bachelor) Biology (2019) Module studies (Bachelor) Orientierungsstudien (2020) Bachelor's degree (1 major) Biology (2021)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 12 / 98

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)

Module title		Abbreviation
Legal and Ethical Aspects in Biological Sciences		07-SQF-RETH-211-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	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 assessment.
Contents		
Good scientific practice; legal and ethical aspects surrounding stem cell research, cloning, transgenic animals, animal testing, genetic engineering in agriculture, biodiversity and nature conservation, biotechnology and microbiology, medicine and neurogenetics.		
Intended learning outcomes		
Students are familiar with the principles of good scientific practice. They are familiar with legal aspects surrounding stem cell research, cloning, transgenic animals, animal testing, genetic engineering in agriculture, biodiversity and nature conservation, biotechnology and microbiology, medicine and neurogenetics and are able to evaluate these in different cultural contexts. Students are able to critically reflect on and critically discuss these topics.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (1)		
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. 30 to 60 minutes) or portfolio Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, summer semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor's degree (1 major) Biology (2011) Bachelor's degree (1 major) Chemistry (2010) Bachelor's degree (1 major) Psychology (2010) Bachelor's degree (1 major, 1 minor) Pedagogy (2013) Bachelor's degree (1 major, 1 minor) Political and Social Studies (2013) Bachelor's degree (1 major, 1 minor) Russian Language and Culture (2008) Bachelor's degree (2 majors) Special Education (2009) Magister Theologiae Catholic Theology (2013)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 14 / 98

First state examination for the teaching degree Grundschule English (2009)
 First state examination for the teaching degree Grundschule Biology (2009)
 First state examination for the teaching degree Grundschule Chemistry (2009)
 First state examination for the teaching degree Grundschule Geography (2009)
 First state examination for the teaching degree Grundschule Protestant Theology (2009)
 First state examination for the teaching degree Grundschule German (2009)
 First state examination for the teaching degree Grundschule History (2009)
 First state examination for the teaching degree Grundschule History (2015)
 First state examination for the teaching degree Grundschule Catholic Theology (2009)
 First state examination for the teaching degree Grundschule Mathematics (2009)
 First state examination for the teaching degree Grundschule Music (2009)
 First state examination for the teaching degree Grundschule Physics (2009)
 First state examination for the teaching degree Grundschule Social Science (2009)
 First state examination for the teaching degree Grundschule Science of Sport (2009)
 First state examination for the teaching degree Hauptschule English (2009)
 First state examination for the teaching degree Hauptschule Biology (2009)
 First state examination for the teaching degree Hauptschule Chemistry (2009)
 First state examination for the teaching degree Hauptschule Geography (2009)
 First state examination for the teaching degree Hauptschule Protestant Theology (2009)
 First state examination for the teaching degree Hauptschule German (2009)
 First state examination for the teaching degree Hauptschule History (2009)
 First state examination for the teaching degree Hauptschule Catholic Theology (2009)
 First state examination for the teaching degree Hauptschule Mathematics (2009)
 First state examination for the teaching degree Hauptschule Music (2009)
 First state examination for the teaching degree Hauptschule Physics (2009)
 First state examination for the teaching degree Hauptschule Social Science (2009)
 First state examination for the teaching degree Hauptschule Science of Sport (2009)
 First state examination for the teaching degree Realschule English (2009)
 First state examination for the teaching degree Realschule Biology (2009)
 First state examination for the teaching degree Realschule Chemistry (2009)
 First state examination for the teaching degree Realschule Geography (2009)
 First state examination for the teaching degree Realschule Protestant Theology (2009)
 First state examination for the teaching degree Realschule French Studies (2009)
 First state examination for the teaching degree Realschule German (2009)
 First state examination for the teaching degree Realschule History (2009)
 First state examination for the teaching degree Realschule Computer Science (2012)
 First state examination for the teaching degree Realschule Catholic Theology (2009)
 First state examination for the teaching degree Realschule Mathematics (2009)
 First state examination for the teaching degree Realschule Music (2009)
 First state examination for the teaching degree Realschule Physics (2009)
 First state examination for the teaching degree Realschule Science of Sport (2009)
 First state examination for the teaching degree Gymnasium English (2009)
 First state examination for the teaching degree Gymnasium Biology (2009)
 First state examination for the teaching degree Gymnasium Chemistry (2009)
 First state examination for the teaching degree Gymnasium Geography (2009)
 First state examination for the teaching degree Gymnasium French Studies (2009)
 First state examination for the teaching degree Gymnasium German (2009)
 First state examination for the teaching degree Gymnasium History (2009)
 First state examination for the teaching degree Gymnasium Greek Philology (2009)
 First state examination for the teaching degree Gymnasium Computer Science (2009)
 First state examination for the teaching degree Gymnasium Italian Studies (2009)
 First state examination for the teaching degree Gymnasium Catholic Theology (2009)
 First state examination for the teaching degree Gymnasium Latin Philology (2009)

First state examination for the teaching degree Gymnasium Mathematics (2012)
 First state examination for the teaching degree Gymnasium Mathematics (2009)
 First state examination for the teaching degree Gymnasium Music (2009)
 First state examination for the teaching degree Gymnasium Physics (2009)
 First state examination for the teaching degree Gymnasium Russian (2009)
 First state examination for the teaching degree Gymnasium Social Science (2009)
 First state examination for the teaching degree Gymnasium Spanish Studies (2009)
 First state examination for the teaching degree Gymnasium Science of Sport (2009)
 First state examination for the teaching degree Gymnasium Music Education, Advanced Studies (2009)
 First state examination for the teaching degree Sonderpädagogik Pedagogy of Secondary Education (2009)
 First state examination for the teaching degree Sonderpädagogik Pedagogy of Primary Education (2009)
 First state examination for the teaching degree Sonderpädagogik Teaching at the German Mittelschule (2013)
 First state examination for the teaching degree Mittelschule English (2013)
 First state examination for the teaching degree Mittelschule Biology (2013)
 First state examination for the teaching degree Mittelschule Chemistry (2013)
 First state examination for the teaching degree Mittelschule Geography (2013)
 First state examination for the teaching degree Mittelschule Protestant Theology (2013)
 First state examination for the teaching degree Mittelschule German (2013)
 First state examination for the teaching degree Mittelschule History (2013)
 First state examination for the teaching degree Mittelschule Catholic Theology (2013)
 First state examination for the teaching degree Mittelschule Mathematics (2013)
 First state examination for the teaching degree Mittelschule Physics (2013)
 First state examination for the teaching degree Mittelschule Social Science (2013)
 First state examination for the teaching degree Mittelschule Science of Sport (2013)
 Bachelor's degree (2 majors) English and American Studies (2009)
 Bachelor's degree (2 majors) German Language and Literature (2013)
 Bachelor's degree (1 major) Chemistry (2015)
 Bachelor's degree (1 major) Geography (2015)
 Bachelor's degree (1 major) Mathematics (2015)
 Bachelor's degree (1 major) Musicology (2015)
 Bachelor's degree (1 major) Physics (2015)
 Bachelor's degree (1 major) Psychology (2015)
 Bachelor's degree (1 major) Business Management and Economics (2015)
 Bachelor's degree (1 major) Nanostructure Technology (2015)
 Bachelor's degree (1 major) Music Education (2015)
 Bachelor's degree (1 major) Computational Mathematics (2015)
 Bachelor's degree (1 major) Political and Social Studies (2015)
 Bachelor's degree (1 major) Functional Materials (2015)
 Bachelor's degree (1 major) Academic Speech Therapy (2015)
 Bachelor's degree (1 major) Indology/South Asian Studies (2015)
 Bachelor's degree (1 major, 1 minor) Egyptology (2015)
 Bachelor's degree (1 major, 1 minor) Pedagogy (2015)
 Bachelor's degree (1 major, 1 minor) History (2015)
 Bachelor's degree (1 major, 1 minor) Musicology (2015)
 Bachelor's degree (1 major, 1 minor) Philosophy (2015)
 Bachelor's degree (1 major, 1 minor) Pre- and Protohistoric Archaeology (2015)
 Bachelor's degree (1 major, 1 minor) Ancient World (2015)
 Bachelor's degree (1 major, 1 minor) Philosophy and Religion (2015)
 Bachelor's degree (1 major, 1 minor) Theological Studies (2015)
 Bachelor's degree (1 major, 1 minor) Political and Social Studies (2015)
 Bachelor's degree (1 major, 1 minor) Russian Language and Culture (2015)
 Bachelor's degree (1 major, 1 minor) German Language and Literature (2015)
 Bachelor's degree (2 majors) Egyptology (2015)

Bachelor's degree (2 majors) Pedagogy (2015)
 Bachelor's degree (2 majors) Protestant Theology (2015)
 Bachelor's degree (2 majors) Musicology (2015)
 Bachelor's degree (2 majors) Philosophy (2015)
 Bachelor's degree (2 majors) Special Education (2015)
 Bachelor's degree (2 majors) Pre- and Protohistoric Archaeology (2015)
 Bachelor's degree (2 majors) Latin Philology (2015)
 Bachelor's degree (2 majors) Music Education (2015)
 Bachelor's degree (2 majors) Philosophy and Religion (2015)
 Bachelor's degree (2 majors) Theological Studies (2015)
 Bachelor's degree (2 majors) Political and Social Studies (2015)
 Bachelor's degree (2 majors) Russian Language and Culture (2015)
 Bachelor's degree (2 majors) Greek Philology (2015)
 Bachelor's degree (2 majors) European Ethnology (2015)
 Bachelor's degree (2 majors) Indology/South Asian Studies (2015)
 First state examination for the teaching degree Grundschule English (2015)
 First state examination for the teaching degree Grundschule Biology (2015)
 First state examination for the teaching degree Grundschule Chemistry (2015)
 First state examination for the teaching degree Grundschule Geography (2015)
 First state examination for the teaching degree Grundschule German (2015)
 First state examination for the teaching degree Grundschule Catholic Theology (2015)
 First state examination for the teaching degree Grundschule Mathematics (2015)
 First state examination for the teaching degree Grundschule Pedagogy of Primary Education (2015)
 First state examination for the teaching degree Grundschule Physics (2015)
 First state examination for the teaching degree Grundschule Social Science (2015)
 First state examination for the teaching degree Grundschule Didactics in English (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Biology (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Chemistry (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Geography (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in German (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in History (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Catholic Theology (Primary School) (2015)
 First state examination for the teaching degree Grundschule Art Education in Primary School (2015)
 First state examination for the teaching degree Grundschule Didactics in Science of Sport (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Mathematics (Primary School) (2015)
 First state examination for the teaching degree Grundschule Music Education in Primary School (2015)
 First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2015)
 First state examination for the teaching degree Grundschule Didactics in Social Science (Primary School) (2015)
 First state examination for the teaching degree Grundschule Science of Sport (2015)
 First state examination for the teaching degree Realschule English (2015)
 First state examination for the teaching degree Realschule Biology (2015)
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 First state examination for the teaching degree Realschule Mathematics (2015)
 First state examination for the teaching degree Realschule Physics (2015)
 First state examination for the teaching degree Realschule Science of Sport (2015)

First state examination for the teaching degree Gymnasium English (2015)
 First state examination for the teaching degree Gymnasium Biology (2015)
 First state examination for the teaching degree Gymnasium Chemistry (2015)
 First state examination for the teaching degree Gymnasium Geography (2015)
 First state examination for the teaching degree Gymnasium French Studies (2015)
 First state examination for the teaching degree Gymnasium German (2015)
 First state examination for the teaching degree Gymnasium History (2015)
 First state examination for the teaching degree Gymnasium Greek Philology (2015)
 First state examination for the teaching degree Gymnasium Computer Science (2015)
 First state examination for the teaching degree Gymnasium Italian Studies (2015)
 First state examination for the teaching degree Gymnasium Catholic Theology (2015)
 First state examination for the teaching degree Gymnasium Latin Philology (2015)
 First state examination for the teaching degree Gymnasium Mathematics (2015)
 First state examination for the teaching degree Gymnasium Physics (2015)
 First state examination for the teaching degree Gymnasium Russian (2015)
 First state examination for the teaching degree Gymnasium Social Science (2015)
 First state examination for the teaching degree Gymnasium Spanish Studies (2015)
 First state examination for the teaching degree Gymnasium Science of Sport (2015)
 First state examination for the teaching degree Sonderpädagogik Pedagogy of Primary Education (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in German (Primary School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Catholic Theology (Primary School) (2015)
 First state examination for the teaching degree Sonderpädagogik Art Education in Primary School (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Science of Sport (Primary School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Mathematics (Primary School) (2015)
 First state examination for the teaching degree Sonderpädagogik Music Education in Primary School (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in English (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Ergonomics (Teaching at the German Mittelschule) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Geography (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Protestant Theology (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in German (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in History (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Catholic Theology (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Art Education in Middle School (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Science of Sport (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Mathematics (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Music Education in Middle School (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Social Science (Middle School) (2015)
 First state examination for the teaching degree Sonderpädagogik Teaching at the German Mittelschule (2015)
 First state examination for the teaching degree Mittelschule English (2015)
 First state examination for the teaching degree Mittelschule Biology (2015)
 First state examination for the teaching degree Mittelschule Chemistry (2015)

First state examination for the teaching degree Mittelschule Geography (2015)
 First state examination for the teaching degree Mittelschule Protestant Theology (2015)
 First state examination for the teaching degree Mittelschule German (2015)
 First state examination for the teaching degree Mittelschule History (2015)
 First state examination for the teaching degree Mittelschule Catholic Theology (2015)
 First state examination for the teaching degree Mittelschule Mathematics (2015)
 First state examination for the teaching degree Mittelschule Physics (2015)
 First state examination for the teaching degree Mittelschule Social Science (2015)
 First state examination for the teaching degree Mittelschule Didactics in English (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Ergonomics (Teaching at the German Mittelschule) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Biology (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Geography (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Protestant Theology (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in German (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in History (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Catholic Theology (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Art Education in Middle School (2015)
 First state examination for the teaching degree Mittelschule Didactics in Science of Sport (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Mathematics (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Music Education in Middle School (2015)
 First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Didactics in Social Science (Middle School) (2015)
 First state examination for the teaching degree Mittelschule Science of Sport (2015)
 First state examination for the teaching degree Mittelschule Teaching at the German Mittelschule (2015)
 Bachelor's degree (2 majors) Geography (2015)
 Bachelor's degree (2 majors) French Studies (2015)
 Bachelor's degree (2 majors) History (2015)
 Bachelor's degree (2 majors) Sport Science (Focus on health and Pedagogics in Movement) (2015)
 Bachelor's degree (2 majors) German Language and Literature (2015)
 Bachelor's degree (1 major) Mathematical Physics (2016)
 First state examination for the teaching degree Grundschule Protestant Theology (2015)
 First state examination for the teaching degree Grundschule Music (2015)
 First state examination for the teaching degree Grundschule Didactics in Protestant Theology (Primary School) (2015)
 First state examination for the teaching degree Realschule Music (2015)
 First state examination for the teaching degree Gymnasium Music (2015)
 First state examination for the teaching degree Gymnasium Music Education, Advanced Studies (2015)
 First state examination for the teaching degree Sonderpädagogik Didactics in Protestant Theology (Primary School) (2015)
 First state examination for the teaching degree Mittelschule Music (2015)
 Bachelor's degree (1 major, 1 minor) French Studies (2016)
 Bachelor's degree (2 majors) French Studies (2016)
 Bachelor's degree (1 major, 1 minor) Italian Studies (2016)
 Bachelor's degree (2 majors) Italian Studies (2016)
 Bachelor's degree (1 major, 1 minor) Spanish Studies (2016)
 Bachelor's degree (2 majors) Spanish Studies (2016)
 Bachelor's degree (1 major) Romanic Languages (French/Italian) (2016)
 Bachelor's degree (1 major) Romanic Languages (French/Spanish) (2016)
 Bachelor's degree (1 major) Romanic Languages (Italian/Spanish) (2016)

Bachelor's degree (1 major) Business Information Systems (2016)
 First state examination for the teaching degree Gymnasium French Studies (2016)
 First state examination for the teaching degree Gymnasium Italian Studies (2016)
 First state examination for the teaching degree Gymnasium Spanish Studies (2016)
 First state examination for the teaching degree Realschule French Studies (2016)
 Bachelor's degree (1 major) Games Engineering (2016)
 Bachelor's degree (1 major, 1 minor) English and American Studies (2016)
 Bachelor's degree (2 majors) English and American Studies (2016)
 First state examination for the teaching degree Grundschule English (2016)
 First state examination for the teaching degree Grundschule Didactics in English (Primary School) (2016)
 First state examination for the teaching degree Realschule English (2016)
 First state examination for the teaching degree Gymnasium English (2016)
 First state examination for the teaching degree Mittelschule English (2016)
 First state examination for the teaching degree Mittelschule Didactics in English (Middle School) (2016)
 First state examination for the teaching degree Sonderpädagogik Didactics in English (Middle School) (2016)
 Bachelor's degree (1 major) Media Communication (2016)
 Bachelor's degree (1 major) Food Chemistry (2016)
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2016)
 Bachelor's degree (1 major) Biology (2017)
 Bachelor's degree (1 major, 1 minor) Geography (2017)
 Bachelor's degree (1 major, 1 minor) History of Medieval and Modern Art (2017)
 Bachelor's degree (2 majors) History of Medieval and Modern Art (2017)
 Bachelor's degree (2 majors) Comparative Indo-European Linguistics (2017)
 Bachelor's degree (1 major) Aerospace Computer Science (2017)
 Bachelor's degree (1 major) Biochemistry (2017)
 Bachelor's degree (1 major) Chemistry (2017)
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2017)
 Bachelor's degree (1 major) Econometrics (2017)
 Bachelor's degree (1 major) Games Engineering (2017)
 Bachelor's degree (1 major) Computer Science (2017)
 First state examination for the teaching degree Gymnasium Greek Philology (2018)
 Bachelor's degree (1 major) Media Communication (2018)
 Bachelor's degree (1 major) Biomedicine (2018)
 Bachelor's degree (1 major) Human-Computer Systems (2018)
 Bachelor's degree (2 majors) Classical Archaeology (2018)
 Bachelor's degree (1 major, 1 minor) Classical Archaeology (2018)
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2018)
 Bachelor's degree (2 majors) Digital Humanities (2018)
 First state examination for the teaching degree Grundschule Physics (2018)
 First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2018)
 First state examination for the teaching degree Realschule Physics (2018)
 First state examination for the teaching degree Gymnasium Physics (2018)
 First state examination for the teaching degree Mittelschule Physics (2018)
 First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2018)
 First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2018)
 Bachelor's degree (1 major) Computer Science (2019)
 First state examination for the teaching degree Gymnasium Mathematics (2019)
 Bachelor's degree (1 major, 1 minor) English and American Studies (2019)
 Module studies (Bachelor) Biology (2019)
 Bachelor's degree (1 major) Indology/South Asian Studies (2019)
 Bachelor's degree (1 major) Business Information Systems (2019)
 Bachelor's degree (2 majors) Indology/South Asian Studies (2019)
 Bachelor's degree (1 major) Business Management and Economics (2019)

Bachelor's degree (1 major) Modern China (2019)
 Module studies (Bachelor) Orientierungsstudien (2020)
 Bachelor's degree (1 major) Biomedicine (2020)
 Bachelor's degree (1 major) Pedagogy (2020)
 Bachelor's degree (1 major) Political and Social Studies (2020)
 Bachelor's degree (1 major) Business Information Systems (2020)
 Bachelor's degree (1 major, 1 minor) Political and Social Studies (2020)
 Bachelor's degree (2 majors) European Ethnology (2020)
 Bachelor's degree (2 majors) Political and Social Studies (2020)
 Bachelor's degree (2 majors) Special Education (2020)
 First state examination for the teaching degree Mittelschule Biology (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Sonderpädagogik Didactics in Biology (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Biology (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Chemistry (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Chemistry (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule German (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in German (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule English (2020 (Prüfungsordnungsversion 2016))
 First state examination for the teaching degree Mittelschule Didactics in English (Middle School) (2020 (Prüfungsordnungsversion 2016))
 First state examination for the teaching degree Mittelschule Protestant Theology (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Protestant Theology (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Geography (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Geography (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule History (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in History (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Catholic Theology (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Catholic Theology (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Mathematics (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Mathematics (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Art Education in Middle School (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Science of Sport (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Didactics in Science of Sport (Middle School) (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Music (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Music Education in Middle School (2020 (Prüfungsordnungsversion 2015))
 First state examination for the teaching degree Mittelschule Teaching at the German Mittelschule (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in English (Middle School) (2020 (Prüfungsordnungsversion 2016))

First state examination for the teaching degree Sonderpädagogik Didactics in Chemistry (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Geography (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Protestant Theology (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in German (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in History (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Catholic Theology (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Art Education in Middle School (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Science of Sport (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Mathematics (Middle School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Music Education in Middle School (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Teaching at the German Mittelschule (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Art Education in Primary School (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Music Education in Primary School (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Science of Sport (Primary School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in German (Primary School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Mathematics (Primary School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Pedagogy of Primary Education (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Protestant Theology (Primary School) (2020 (Prüfungsordnungsversion 2015))

First state examination for the teaching degree Sonderpädagogik Didactics in Catholic Theology (Primary School) (2020 (Prüfungsordnungsversion 2015))

Bachelor's degree (1 major) Physics (2020)

Bachelor's degree (1 major) Nanostructure Technology (2020)

Bachelor's degree (1 major) Mathematical Physics (2020)

Bachelor's degree (1 major) Aerospace Computer Science (2020)

Bachelor's degree (1 major, 1 minor) Museology and material culture (2020)

First state examination for the teaching degree Grundschule Didactics in Physics (Primary School) (2020)

First state examination for the teaching degree Grundschule Physics (2020)

First state examination for the teaching degree Gymnasium Physics (2020)

First state examination for the teaching degree Realschule Physics (2020)

First state examination for the teaching degree Sonderpädagogik Didactics in Physics (Middle School) (2020)

First state examination for the teaching degree Mittelschule Didactics in Physics (Middle School) (2020)

First state examination for the teaching degree Mittelschule Physics (2020)

Bachelor's degree (1 major, 1 minor) Pedagogy (2020)

Bachelor's degree (2 majors) Pedagogy (2020)

First state examination for the teaching degree Grundschule Political and Social Studies (2020)
 First state examination for the teaching degree Grundschule Didactics in Political and Social Studies (Primary School) (2020)
 First state examination for the teaching degree Sonderpädagogik MS-Didaktik Career and Economics (2020)
 First state examination for the teaching degree Sonderpädagogik Didactics in Political and Social Studies (Secondary School) (2020)
 First state examination for the teaching degree Mittelschule MS-Didaktik Career and Economics (2020)
 First state examination for the teaching degree Mittelschule Didactics in Political and Social Studies (Secondary School) (2020)
 First state examination for the teaching degree Mittelschule Political and Social Studies (2020)
 First state examination for the teaching degree Gymnasium Political and Social Studies (2020)
 Bachelor's degree (1 major) Psychology (2020)
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2020)
 Magister Theologiae Catholic Theology (2021)
 Bachelor's degree (2 majors) History (2021)
 Bachelor's degree (1 major, 1 minor) History (2021)
 First state examination for the teaching degree Grundschule History (2021)
 First state examination for the teaching degree Gymnasium History (2021)
 First state examination for the teaching degree Realschule History (2021)
 First state examination for the teaching degree Mittelschule History (2021)
 Bachelor's degree (1 major) Media Communication (2021)
 Bachelor's degree (2 majors) Theological Studies (2021)
 Bachelor's degree (1 major, 1 minor) Theological Studies (2021)
 Bachelor's degree (1 major, 1 minor) English and American Studies (2021)
 Bachelor's degree (2 majors) English and American Studies (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 First state examination for the teaching degree Grundschule Pedagogy of Primary Education (2021)
 First state examination for the teaching degree Gymnasium English (2021)
 Bachelor's degree (1 major) Functional Materials (2021)
 First state examination for the teaching degree Gymnasium Philosophy and Ethics (2021)
 Bachelor's degree (1 major) Computer Science und Sustainability (2021)
 Bachelor's degree (2 majors) Comparative Indo-European Linguistics (2021)
 Bachelor's degree (1 major) Food Chemistry (2021)
 Bachelor's degree (1 major) Quantum Technology (2021)
 Bachelor's degree (2 majors) Special Education (2021)
 Bachelor's degree (1 major) Business Information Systems (2021)
 Bachelor's degree (1 major) Econometrics (2021)
 Bachelor's degree (1 major) Business Management and Economics (2021)
 First state examination for the teaching degree Sonderpädagogik Pedagogy of Primary Education (2021)
 Bachelor's degree (1 major) Human-Computer Systems (2022)
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2022)
 Bachelor's degree (1 major) Biochemistry (2022)
 Bachelor's degree (1 major) Biology (2022)
 Bachelor's degree (1 major) Econometrics (2022)
 Bachelor's degree (1 major) Mathematical Data Science (2022)
 Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022)
 First state examination for the teaching degree Gymnasium Philosophy and Ethics (2022)
 Bachelor's degree (2 majors) Ancient Near Eastern Archaeology (2022)
 Bachelor's degree (1 major, 1 minor) Ancient World (2022)
 Bachelor's degree (2 majors) Ancient Near Eastern Studies (2022)
 Bachelor's degree (1 major) Franco-German studies: language, culture, digital competence (2022)
 First state examination for the teaching degree Gymnasium Russian (2023)

First state examination for the teaching degree Gymnasium Mathematics (2023)
 First state examination for the teaching degree Gymnasium English (2023)
 First state examination for the teaching degree Realschule English (2023)
 First state examination for the teaching degree Grundschule English (2023)
 First state examination for the teaching degree Grundschule Didactics in English (Primary School) (2023)
 First state examination for the teaching degree Mittelschule English (2023)
 First state examination for the teaching degree Mittelschule Didactics in English (Middle School) (2023)
 First state examination for the teaching degree Sonderpädagogik Didactics in English (Middle School) (2023)
 First state examination for the teaching degree Gymnasium Geography (2023)
 First state examination for the teaching degree Realschule Geography (2023)
 First state examination for the teaching degree Grundschule Geography (2023)
 First state examination for the teaching degree Mittelschule Geography (2023)
 Bachelor's degree (1 major) European Law (2023)
 Bachelor's degree (1 major, 1 minor) English and American Studies (2023)
 Bachelor's degree (2 majors) English and American Studies (2023)
 Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023)
 Bachelor's degree (1 major) Mathematics (2023)
 Bachelor's degree (1 major) Business Information Systems (2023)
 Bachelor's degree (1 major) Econometrics (2023)
 Bachelor's degree (1 major, 1 minor) History of Medieval and Modern Art (2023)
 Bachelor's degree (2 majors) History of Medieval and Modern Art (2023)
 Bachelor's degree (2 majors) Special Education (2023)
 Bachelor's degree (1 major) Business Management and Economics (2023)
 Bachelor's degree (1 major) Geography (2023)
 Bachelor's degree (2 majors) Geography (2023)
 Bachelor's degree (1 major, 1 minor) Geography (2023)
 Bachelor's degree (2 majors) European Ethnology/Empiric Cultural Studies (2023)
 First state examination for the teaching degree Grundschule German (2024)
 First state examination for the teaching degree Gymnasium German (2024)
 First state examination for the teaching degree Realschule German (2024)
 First state examination for the teaching degree Sonderpädagogik Didactics in German (Middle School) (2024)
 First state examination for the teaching degree Mittelschule Didactics in German (Middle School) (2024)
 First state examination for the teaching degree Grundschule Didactics in German (Primary School) (2024)
 First state examination for the teaching degree Sonderpädagogik Didactics in German (Primary School) (2024)
 First state examination for the teaching degree Mittelschule German (2024)
 Bachelor's degree (1 major) Mathematical Physics (2024)
 Bachelor's degree (2 majors) German Language and Literature (2024)
 Bachelor's degree (1 major, 1 minor) German Language and Literature (2024)
 Bachelor's degree (1 major) Music Education (2024)
 Bachelor's degree (2 majors) Music Education (2024)
 Bachelor's degree (1 major, 1 minor) Music Education (2024)
 First state examination for the teaching degree Grundschule Music Education in Primary School (2024)
 First state examination for the teaching degree Sonderpädagogik Music Education in Primary School (2024)
 First state examination for the teaching degree Mittelschule Music Education in Middle School (2024)
 First state examination for the teaching degree Sonderpädagogik Music Education in Middle School (2024)
 Bachelor's degree (1 major) Indology/South Asian Studies (2024)
 Bachelor's degree (2 majors) Indology/South Asian Studies (2024)
 Bachelor's degree (1 major, 1 minor) Indology/South Asian Studies (2024)
 Bachelor's degree (1 major, 1 minor) Ancient World (2024)
 Bachelor's degree (2 majors) Digital Humanities (2024)
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2024)
 Bachelor's degree (1 major) Midwifery (2024)
 Bachelor's degree (2 majors) Greek Philology (2024)

Bachelor's degree (2 majors) Latin Philology (2024)
 First state examination for the teaching degree Gymnasium Latin Philology (2024)
 Bachelor's degree (1 major) Business Information Systems (2024)
 Bachelor's degree (1 major) Economathematics (2024)
 Bachelor's degree (1 major) Business Management and Economics (2024)
 Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)
 First state examination for the teaching degree Gymnasium English (2024)
 First state examination for the teaching degree Mittelschule MS-Didaktik Career and Economics (2024)
 First state examination for the teaching degree Sonderpädagogik MS-Didaktik Career and Economics (2024)
 First state examination for the teaching degree Grundschule History (2024)
 First state examination for the teaching degree Gymnasium History (2024)
 First state examination for the teaching degree Realschule History (2024)
 First state examination for the teaching degree Mittelschule History (2024)
 First state examination for the teaching degree Mittelschule Didactics in History (Middle School) (2024)
 First state examination for the teaching degree Sonderpädagogik Didactics in History (Middle School) (2024)
 First state examination for the teaching degree Grundschule Didactics in History (Primary School) (2024)
 First state examination for the teaching degree Gymnasium Greek Philology (2024)
 Bachelor's degree (1 major) Human-Computer-Interaction (2024)
 First state examination for the teaching degree Grundschule Art Education in Primary School (2024)
 First state examination for the teaching degree Sonderpädagogik Art Education in Primary School (2024)
 First state examination for the teaching degree Sonderpädagogik Art Education in Middle School (2024)
 First state examination for the teaching degree Mittelschule Art Education in Middle School (2024)
 Bachelor's degree (2 majors) Art Education (2024)
 Bachelor's degree (1 major) Digital Business & Data Science (2024)
 Bachelor's degree (1 major) Classics (2024)
 Bachelor's degree (1 major) Diversity, Ethics and Religions (2024)
 Bachelor's degree (1 major) Functional Materials (2025)
 Bachelor's degree (1 major) (2025)
 Bachelor's degree (1 major) Food Chemistry (2025)
 Bachelor's degree (1 major, 1 minor) European Ethnology/Empiric Cultural Studies (2025)
 Bachelor's degree (1 major) Pedagogy (2025)
 Bachelor's degree (2 majors) Pedagogy (2025)
 Bachelor's degree (1 major) Economathematics (2025)
 Bachelor's degree (1 major) Academic Speech Therapy (2025)
 Bachelor's degree (1 major, 1 minor) Pedagogy (2025)
 Bachelor's degree (1 major) Games Engineering (2025)

Module title		Abbreviation
Developmental Biology of Animals		07-3A3EBIOTI-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
<p>In this module, students will acquire theoretical and practical background knowledge on animal developmental biology. The following topics will be covered: early embryonic development of various model organisms (amphibians, nematodes, Drosophila, mouse) and relevance for the systematics of animals, gametogenesis (production of spermatozoa and ova), differential gene expression, cell growth and molecular regulation of cell development, organogenesis, pattern formation, carcinogenesis, stem cell research and cloning, metamorphosis (amphibians, insects), eco-devo, evo-devo.</p>		
Intended learning outcomes		
<p>1. Fundamental concepts in developmental biology. 2. Embryonic and postembryonic development of selected model organisms (pattern formation). 3. Molecular mechanisms as well as control of cell development. 4. Interdisciplinary connections between developmental biology and other branches of biology. 5. Cell biology of cotyledon, cancer and stem cells as well as gametes. 6. Interrelations between ontogeny and evolution/environment. 7. Physiological aspects of the developmental processes discussed.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + 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		
--		
Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 5		
Module appears in		
<p>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) Bachelor's degree (1 major) Biomedicine (2018)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 26 / 98

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 title		Abbreviation
Plant and Animal Ecology		07-3A3OEKO-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
6	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>This module will provide students with an overview of the interactions of plants and animals with their abiotic and biotic environments. The module will focus on the functional adaptation to environmental conditions as well as on the structure and dynamics of populations, communities and ecosystems. Students will be introduced to fundamental model concepts of ecology, will become familiar with examples of research findings and will acquire the fundamental knowledge necessary to develop an understanding of current ecological problems.</p>		
Intended learning outcomes		
<p>Students are familiar with the fundamental principles of research in the field of ecology and with the most important abiotic and biotic factors that influence the distribution and frequency of occurrence of organisms in their environment. In addition, they understand the scientific relevance ecology has to the assessment of environmental issues.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (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)		
written examination (approx. 90 minutes) creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
180 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 4		
Module appears in		
<p>Bachelor's degree (1 major) Biology (2015) Bachelor's degree (1 major) Geography (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) First state examination for the teaching degree Gymnasium Biology (2015) Bachelor's degree (1 major) Biology (2017) Bachelor's degree (1 major) Computer Science (2017) Bachelor's degree (1 major) Computer Science (2019)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 28 / 98

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) 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
Structure and Function of Cells		07-1A1ZE-152-m01
Module coordinator		Module offered by
holder of the Chair of Plant Physiology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	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 assessment.
Contents		
<p>The course will acquaint students with the elementary building blocks of life as well as biological categories. Building on this knowledge, the course will then discuss the cell, the smallest unit of life, starting with its macroscopic structure before moving on to its microscopic structure. The course will point out differences and similarities between prokaryotic cells (bacteria, archaeobacteria) and eukaryotic cells (animals, plants). Students will acquire the fundamental knowledge necessary to understand the forms and functions of prokaryotic, animal and plant organisms, with morphology and cytology being discussed in a physiological context. The contents of the module are relevant for biological disciplines at all levels of biological organisation. Students will also acquire and practise some of the fundamental preparation skills bioscientists are often required to possess.</p>		
Intended learning outcomes		
<ul style="list-style-type: none"> • Knowledge of the structures of prokaryotic and eukaryotic cells and their (biological) macromolecules. • Knowledge of the specific characteristics of the intracellular and extracellular structures of prokaryotes as well as animal and plant cells. • Ability to recognise evolution as the driving force behind the phylogeny of species. • Familiarity with the distinguishing characteristics of major representatives of prokaryotes, animals and plants. • Familiarity with the components and functioning of microscopes. • Fundamental skills in the interpretation of macroscopic and histologic preparations by light microscopy. • Fundamental preparation skills. 		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1.5) + Ü (3.5)		
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		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
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) Biology (2017)
Bachelor's degree (1 major) Biology (2021)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
Bachelor's degree (1 major) Biology (2022)
exchange program Biosciences (2022)

Module title		Abbreviation
Mathematical Biology and Biostatistics		07-M-BST-152-m01
Module coordinator		Module offered by
holder of the Chair of Bioinformatics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Fundamental principles of the most important mathematical and statistical methods in biology.		
Intended learning outcomes		
Students will have acquired fundamental skills in the evaluation of experiments, the interpretation of readings and numbers as well as the mathematical description of biological processes.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (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)		
written examination (approx. 60 minutes) creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
--		
Module appears in		
Bachelor's degree (1 major) Biochemistry (2015) 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) 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) Bachelor's degree (1 major) Biology (2022)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 33 / 98

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 title		Abbreviation
Developmental Biology of Plants		07-3A3EBIOPF-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
In this module, students will acquire an insight into the fundamental processes of plant developmental biology over a plant's entire life cycle from germination to reproduction. The module will discuss the molecular determination and regulation of different developmental biological processes in plants as well as their plasticity.		
Intended learning outcomes		
1. Fundamental concepts in plant developmental biology. 2. Developmental biology of selected plant model organisms. 3. Developmental biological processes at specific stages in the life cycle of plants. 4. Molecular mechanisms underlying pattern formation, morphogenesis and organogenesis in plants. 5. Establishment of plant embryonic axes. 6. Physiological aspects of the developmental processes in plants that were discussed. 7. Plasticity of developmental biological processes: regulation by endogenous and environmental factors.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + 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		
--		
Additional information		
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Workload		
120 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 5		
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) Biology (2022)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 35 / 98

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

Module title		Abbreviation
Physiology of Prokaryotes		07-2A2PHYPR-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
The module provides knowledge about the structure and function of a bacterial cell and the versatile bacterial metabolism. During exercises, fundamental principles of bacterial physiology will be illustrated by help of suitable experiments.		
Intended learning outcomes		
Students are familiar with the fundamental principles of bacterial physiology. They are familiar with basic techniques in experimental microbiology and able to apply them.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (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)		
written examination (approx. 60 minutes) creditable for bonus		
Allocation of places		
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Additional information		
The exercises take place all day as a block event.		
Workload		
120 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 3		
Module appears in		
Bachelor's degree (1 major) Biology (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
Plant Physiology		07-2A2PHYPF-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
<p>This module will acquaint students with the principles of general plant physiology and will provide them with an opportunity to develop the fundamental skills for working in a biological laboratory. The module will first address the biochemistry of the cell and will then move on to discuss the physiological processes that regulate the internal environment of plants in particular. Using the example of plants, the module will introduce students to the general principles of physiology. The module will also elaborate on the characteristic peculiarities of plants in comparison with animals and prokaryotes.</p>		
Intended learning outcomes		
<p>- Familiarity with general physiological processes in plants and the regulation of these. - Familiarity with the factors that distinguish plant physiology from animal and prokaryotic physiology. - Fundamental knowledge and skills on how to perform, analyse and present scientific experiments. - Essential lab skills. - Familiarity with methods for the investigation of fundamental physiological processes in plants.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + Ü (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)		
written examination (approx. 60 minutes) creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 2		
Module appears in		
<p>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)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 38 / 98

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

Module title		Abbreviation
Ecology and Developmental Biology of Marine Organisms		07-4S1MEER-152-m01
Module coordinator		Module offered by
head of the Department of Electronmicroscopy		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
A combination of lab work and field trips, this module will provide students with an insight both into the organismal diversity of a marine ecosystem and into the biocenosis of the littoral of the island of Helgoland in the North Sea.		
Intended learning outcomes		
Students will have enhanced their knowledge of form as well as their understanding of concepts in synecology. In addition, they will have learned how to systematically collect ecological field data.		
Courses (type, number of weekly contact hours, language – if other than German)		
Ü (4) + E (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)		
Log (approx. 10 to 20 pages) creditable for bonus		
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 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, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module. In this case, places on all courses of a module that are concerned will be allocated in the same procedure. 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 in all modules 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 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		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 40 / 98

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)
 First state examination for the teaching degree Grundschule Biology (2015)
 First state examination for the teaching degree Realschule Biology (2015)
 First state examination for the teaching degree Gymnasium Biology (2015)
 First state examination for the teaching degree Mittelschule Biology (2015)
 Bachelor's degree (1 major) Biology (2017)
 First state examination for the teaching degree Mittelschule Biology (2020 (Prüfungsordnungsversion 2015))
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 Bachelor's degree (1 major) Biology (2022)
 exchange program Biosciences (2022)

Module title		Abbreviation
Excursion on the Ecology and Faunistics of Terrestrial Ecosystems of the Temperate Zone		07-4S1LAND-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
During this field trip, students will become acquainted with the species characteristic of a terrestrial ecosystem of the temperate zone in an ecological context. Faunistic surveys will be carried out using different methods of ecological data collection.		
Intended learning outcomes		
Students will have enhanced their knowledge of form as well as their understanding of concepts in synecology. In addition, they will have learned how to systematically collect ecological field data.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) + E (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)		
term paper (approx. 10 to 20 pages) creditable for bonus		
Allocation of places		
<p>12 places.</p> <p>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.</p> <p>A waiting list will be maintained and places re-allocated as they become available.</p> <p>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 this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.</p> <p>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;</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 42 / 98

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 18o 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) Biology (2017)
Bachelor's degree (1 major) Biology (2021)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Excursion on the Ecology and Faunistics of a Tropical Ecosystem		07-4S1TROP-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>In a tropical ecosystem in the Paleotropics or Neotropics, participants will implement small projects on ecological or nature conservation-related issues and will undertake field trips to become familiar with the local flora and fauna. Participants will become familiar with different project stages from experiment design, implementation and data analysis through to data presentation.</p>		
Intended learning outcomes		
<p>Students have acquired an advanced knowledge on tropical species diversity. They know how to design, perform and present ecological experiments in the Paleotropics or Neotropics.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
Ü (4) + E (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)		
term paper (approx. 10 to 20 pages) creditable for bonus		
Allocation of places		
<p>5 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 this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.</p>		

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) Biology (2017)
Bachelor's degree (1 major) Biology (2021)
Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Ecology and Nature Conservation		07-4S1NAT-171-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Global environmental change due to the destruction and fragmentation of natural habitats, climate change, intensive land use and invasive species have significant impacts on ecological communities and ecosystem functions. This course discusses essentials of community ecology, landscape ecology, agroecology and forest ecology and provides knowledge on the diversity and biotic interaction of different animal groups. A focus is on the application of ecological mechanisms for sustainable use of biological resources and nature conservation. The course comprises lectures as well as field exercises in various terrestrial habitats.</p>		
Intended learning outcomes		
<p>Participants are familiar with fundamental ecological principles and mechanisms as well as ecological field methods and have developed taxonomical skills. They are able to independently investigate issues relating to global change and nature conservation, applying theoretical concepts and empirical methods.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
Ü (4) + S (1)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>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.</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 46 / 98

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 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 (2017)
 Bachelor's degree (1 major) Biology (2021)
 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)
 exchange program Biosciences (2022)

Module title		Abbreviation
Evolutionary Ecology		07-4S1EVO-171-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Every organism survives and reproduces in an environment defined by its con-specifics, members of other species, and the abiotic attributes of the world around it. In this course, we explore mechanisms of evolutionary adaptation to these conditions and thus why individuals, populations, or species differ from each other. Important principles of phenotypic adaptation will be introduced and explained with examples from areas like "life-history evolution", evolution of morphological and behavioural traits, or the coevolution between hosts and parasites. The course includes a lecture as well as exercises on theoretical and empirical issues.</p>		
Intended learning outcomes		
<p>Students will understand fundamental principles and drivers of phenotypic evolution. They know important theoretical concepts and exemplary methods for studying the evolution of certain attributes and understanding their adaptive value. Students thus gain an insight into tight interactions between environment (ecology) and trait evolution.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) + V (1)		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>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.</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 48 / 98

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 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 (2017)
 Bachelor's degree (1 major) Biology (2021)
 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)
 exchange program Biosciences (2022)

Module title		Abbreviation
Ecological Modelling		07-6S3NVO32-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
On the basis of exemplary tasks in ecology, the students will learn about different simulation techniques and modelling methods. At the same time, they will develop their own simulation program to address demographical or evolutionary questions.		
Intended learning outcomes		
The students will expand their knowledge in the theory and practice of ecological modelling. They will be able to develop, apply and interpret adequate modelling techniques.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (1) + S (1) Module taught in: German and/or English		
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. 30 to 60 minutes) or b) log (approx. 10 to 30 pages) Language of assessment: German and/or English 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 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 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) Biology (2017)
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Nature Conservation Biology		07-6S3NVO33-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
The module will discuss biodiversity, focusing on the issue of biodiversity loss and related issues in the area of nature conservation. By way of examples, students will be introduced to the theory and practice of conservation biology.		
Intended learning outcomes		
Students have developed skills in the area of national and international nature conservation. They are able to critically evaluate whether particular steps in the project management cycle can help reach the defined conservation targets.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + S (1) + E (1) Module taught in: German and/or English		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 20 to 45 minutes) Language of assessment: German and/or English 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 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 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) Biology (2017)
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Tropical Biology		07-6S3NVO34-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This module provides the fundamentals of the biology of tropical habitats and tropical communities.		
Intended learning outcomes		
Students will be able to recognise the special position of tropical habitats within the biosphere and to explain the significance tropical habitats have for the ecosystem. They will be able to discuss and deliver presentations on current publications in the field of tropical biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (2) Module taught in: German and/or English		
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. 30 to 60 minutes) Language of assessment: German and/or English 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 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 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) Biology (2017)
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Methods in Biotechnology		07-4S1AMB-152-m01
Module coordinator		Module offered by
holder of the Chair of Biotechnology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>This module (lecture and seminar) will provide students with an overview of instrument-based methods in biotechnology and biomedicine and the underlying physical principles. It will discuss modern methods for the analysis of biological matter on the molecular and cellular level. These methods include light microscopy, fluorescence spectroscopy, electron microscopy, atomic force microscopy, flow cytometry and microfluidics.</p>		
Intended learning outcomes		
<p>Students will gain an overview of key methods in biotechnology and their respective advantages and disadvantages. They will learn to decide what method is most suitable for addressing a particular issue.</p>		
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)		
written examination (approx. 30 to 60 minutes) creditable for bonus		
Allocation of places		
<p>25 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 this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.</p>		

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) Nanostructure Technology (2015)
 Bachelor's degree (1 major) Computational Mathematics (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, 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
Aspects of Molecular Biotechnology		07-4S1MOLB-152-m01
Module coordinator		Module offered by
holder of the Chair of Biotechnology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Fundamental principles of "white" biotechnology, bioreactors, biocatalysis, immobilisation of cells and enzymes, production of biomolecules, molecular biology, recombinant DNA technology, protein engineering, biosensor design, drug design, drug targeting, molecular diagnostics, recombinant antibodies, hybridoma technology, electromanipulation of cells.</p>		
Intended learning outcomes		
<p>Students will gain an overview of traditional and modern methods in biotechnology and their respective advantages and disadvantages. They will learn to decide what method is most suitable for addressing a particular issue. Students will acquire a knowledge of fundamental methods in biotechnology that will enable them to independently review relevant literature. In addition, they will become acquainted with - or, where necessary, will be able to independently acquaint themselves with - relevant mechanisms.</p>		
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)		
written examination (approx. 30 to 60 minutes) creditable for bonus		
Allocation of places		
<p>25 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 this third ranking.</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 58 / 98

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) Nanostructure Technology (2015)
 Bachelor's degree (1 major) Computational Mathematics (2015)
 Master's degree (1 major) Functional Materials (2016)
 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, 2021)
 Bachelor's degree (1 major) Quantum Technology (2021)
 Bachelor's degree (1 major) Biology (2022)
 Master's degree (1 major) Functional Materials (2022)
 exchange program Biosciences (2022)
 Bachelor's degree (1 major) Mathematics (2023)
 Master's degree (1 major) Functional Materials (2025)

Module title		Abbreviation
Biology and Ecology of Arthropods		07-4S1NVO5-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
More in-depth discussion of the structure and dynamics of human and animal populations; regulation of population density; management.		
Intended learning outcomes		
Students are able to interpret the structure and dynamics of populations and metapopulations on the basis of model concepts in population ecology and to apply more advanced methods of quantitative analysis to these.		
Courses (type, number of weekly contact hours, language – if other than German)		
Ü (4) + S (1)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. creditable for bonus</p>		
Allocation of places		
<p>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 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</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 60 / 98

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

Module title		Abbreviation
Biology and Ecology of Arthropods		07-4S1NVO6-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>All aspects of the biology and ecology of arthropods, from phylogeny and morphology through to behaviour and ecology. The lecture will provide you with an overview of the biology and ecology of arthropods or will focus on specific taxa. It will discuss findings of basic and applied research on and with arthropods and will highlight the diversity of relationships between arthropods and humans. Practical exercises that will vary according to the group of arthropods we focused on will provide you with an opportunity to consolidate your knowledge on the topics covered in the lecture.</p>		
Intended learning outcomes		
Ability to conduct research on and with arthropods to address suitable problems as well as to explain the role of arthropods in ecosystems.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (5) + V (1)		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. creditable for bonus</p>		
Allocation of places		
<p>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 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 ha-</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 62 / 98

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) Biology (2017)
 Bachelor's degree (1 major) Biology (2021)
 Bachelor's degree (1 major, 1 minor) Biology (Minor, 2021)
 Bachelor's degree (1 major) Biology (2022)

Module title		Abbreviation
Animal Physiology		07-2A2PHYTI-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.
Contents		
This module will acquaint students with the principles of general and comparative animal physiology and will provide them with an opportunity to develop the fundamental skills for working in a physiological laboratory. The module will focus on neurophysiology and sensory physiology as well as aspects of metabolic physiology (respiration and excretion).		
Intended learning outcomes		
Students have developed an understanding of the physiological functions and regulation of organisms. They have acquired fundamental knowledge on planning, setup, interpretation and presentation of scientific results.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (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)		
written examination (approx. 60 minutes) creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
120 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 41 I Nr. 2 § 61 I Nr. 2		
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) Biology (2022) Bachelor's degree (1 major) Mathematics (2023)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 64 / 98

Module title		Abbreviation
Genes, Molecules, Technologies		07-3A3GEMT-152-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
6	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The module <i>Gene, Moleküle, Technologien (Genes, Molecules, Technologies)</i> will include lectures on the following topics: The section <i>Spezielle Genetik (Special Genetics)</i> will build on <i>Einführung in die Genetik (Introduction to Genetics)</i> 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 <i>Einführung in die Bioinformatik (Introduction to Bioinformatics)</i>, 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 <i>Einführung in die Biotechnologie (Introduction to Biotechnology)</i>, 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 <i>Einführung in die Pharmakokinetik (Introduction to Pharmacokinetics)</i> 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.</p>		
Intended learning outcomes		
<p>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.</p>		
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		
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Additional information		
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Workload		
180 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) 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 coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	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 assessment.
Contents		
<p>With the module component <i>Makromoleküle (Macromolecules)</i> as a starting point, the lecture will provide students with deeper insights into the molecular biology and biochemistry of prokaryotes and eukaryotes. Students will become familiar with fundamental principles of molecular biology (replication, transcription, splicing and translation) and the biochemistry of carbohydrates, lipids, proteins and nucleic acids. Experiments will be performed on selected topics that were discussed in the lecture. The exercise will cover practical aspects of lab work (PCR, DNA and protein gel electrophoresis, blot, enzyme kinetics and detection, protein isolation).</p>		
Intended learning outcomes		
Students are familiar with the fundamental principles of biochemistry.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (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)		
written examination (approx. 60 minutes) creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
<p>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) Biology (2022)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 67 / 98

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

Module title		Abbreviation
The Flora of Germany		07-4A4FLO-211-m01
Module coordinator		Module offered by
holder of the Chair of Plant Physiology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
7	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Admission prerequisite to assessment: Regular participation in the excursions (at least 80% attendance) and exercises. The prerequisite for admission to the exam is regular attendance at the exercises (at least 80% attendance) and the completion of the exercises to the extent of approx. 25 -30 hours
Contents		
<p>The module will discuss the fundamental principles of the systematics and ecology of flowering plants. Students will acquire an overview of the major flowering plants to be found in the temperate zone as well as their ecological and economic importance. Using the field guide <i>Flora von Deutschland</i> by Schmeil-Fitschen, the course will demonstrate how dichotomous keys are used, and students will practise identifying freshly-gathered plants using dichotomous keys. Identifying plants, students will learn how to identify major morphological plant characteristics and will become familiar with the respective terminology. The module will also include field trips to typical habitats in the Botanical Garden and the vicinity of Würzburg. Students will become familiar with the common as well as scientific names of the plants found and will be introduced to the family- as well as species-specific characteristics of these plants. Students will practise using field guides and identification keys on site. Habitat ecological, geobotanical, climatic as well as conservation-relevant characteristics will also be discussed. The module will also include sessions at the Botanical Garden of the University of Würzburg with its outdoor facilities and greenhouses to help students acquire species identification skills.</p>		
Intended learning outcomes		
Students have acquired knowledge and skills related to the ecology, systematics and taxonomy of indigenous flowering plants. They are familiar with the terminology of plant morphology and know how to use Floras and set up scientific herbaria.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (2) + E (2.5)		
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. 45 minutes) and practical identification assignment (approx. 45 minutes), weighted or portfolio 1:1 Assessment offered: Once a year, summer semester creditable for bonus		
Allocation of places		
<p>180 yes 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 com-</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 69 / 98

ponent 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 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

210 h

Teaching cycle

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

§ 41 I Nr. 1 (3 ECTS credits) and § 41 I Nr. 4 (2 ECTS credits)

§ 61 I Nr. 1 (3 ECTS credits) and § 61 I Nr. 4 (2 ECTS credits)

Module appears in

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

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

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

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

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

Module title		Abbreviation
The Fauna of Germany		07-4A4FAU-152-m01
Module coordinator		Module offered by
holder of the Chair of Animal Ecology and Tropical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
7	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	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.
Contents		
<p>In this module, students will acquire an overview of selected groups of animals to be found in Central Europe. They will acquire a fundamental knowledge of the systematics and taxonomy of these animals and will practise identifying species, using specimens of animals. Selection of specimens will be taxon-specific and will represent specific habitats or lifestyles. Exercises in a variety of habitats will provide students with an opportunity to consolidate the knowledge and skills they acquired in the lab by identifying living specimens including their ecology and behavioural biology.</p>		
Intended learning outcomes		
<p>Students possess species identification skills. They know how to taxonomically classify selected representatives of the indigenous fauna (vertebrates, invertebrates) and use identification keys. They are familiar with selected Central European habitats as well as their faunas and phenology. On the basis of the morphology and habitats of species, students are able to predict the biology and ecology of these species as well as, where applicable, to predict whether they function as indicators and are of conservation concern.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (2) + E (2.5)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>written examination (approx. 45 minutes) and practical identification assignment (approx. 45 minutes), weighted 1:1 Assessment offered: Once a year, summer semester creditable for bonus</p>		
Allocation of places		
<p>180 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.</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 71 / 98

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 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

210 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) 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 Genetics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Neurobiology and methods in molecular neurobiology (neurogenetic model system Drosophila and humans) -- focus: sleep behaviour and endogenous clock.		
Intended learning outcomes		
Students have acquired an advanced knowledge of the neurobiology of a model organism and are able to apply the relevant methods in neurobiology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) + S (1)		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. creditable for bonus</p>		
Allocation of places		
<p>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 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</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 73 / 98

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) 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 Sociobiology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	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)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. creditable for bonus</p>		
Allocation of places		
<p>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 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))</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 75 / 98

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

Module title		Abbreviation
Analysis of Chromosomes		07-4S1MZ2-152-m01
Module coordinator		Module offered by
head of the Department of Electronmicroscopy		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Overview of the structure of chromosomes of somatic and meiotic cells.		
Intended learning outcomes		
Students are able to analyse chromosomal structures.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + Ü (5)		
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. 30 to 60 minutes) creditable for bonus		
Allocation of places		
<p>18 places.</p> <p>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.</p> <p>A waiting list will be maintained and places re-allocated as they become available.</p> <p>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 this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot.</p> <p>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.</p>		
minor in a Bachelor's degree programme Biology (2021)		<p>JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021</p>
		page 77 / 98

Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 18o 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) Biology (2022)

Module title		Abbreviation
Special Bioinformatics 1		07-4S1MZ6-152-m01
Module coordinator		Module offered by
holder of the Chair of Bioinformatics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Fundamental principles of the tree of life, fundamental principles of phylogenetics (methods and markers), fundamental principles of evolutionary biology (concepts), sequence analysis, RNA structure prediction, phylogenetic reconstruction.		
Intended learning outcomes		
Students are able to use software and databases for sequence analysis, RNA structure prediction and phylogenetic reconstruction.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (5)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
Log (approx. 10 to 20 pages) Language of assessment: German or English 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 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 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) 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, 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		Module offered by
holder of the Chair of Plant Physiology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This module will equip students with advanced knowledge on the structure and function of nucleic acids and proteins as well as on the search for and analysis and modelling of plant macromolecules using databases and specific software.		
Intended learning outcomes		
Students have acquired a specialist knowledge of the structure-function relationships of macromolecules and are able to work with relevant databases and software.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (1) + Ü (5)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
computerised practical examination (approx. 6 hours) creditable for bonus		
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 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 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;		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 81 / 98

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) 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		07-4S1PS2-211-m01
Module coordinator		Module offered by
holder of the Chair of Plant Physiology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Complex experiments to introduce students to the current state of research in plant ecophysiology as well as discussion of experimental findings in a comprehensive scientific context.		
Intended learning outcomes		
Students are able to use current methods in plant ecophysiology as well as to document experimental findings and put these in a scientific context.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) + S (1)		
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		
15 yes 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		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 83 / 98

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 (2021)
 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 title		Abbreviation
Pharmaceutical Drugs in Plants		07-4S1PS3-152-m01
Module coordinator		Module offered by
holder of the Chair of Pharmaceutical Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>This module will introduce students to the major active agent groups in medicinal plants and phytopharmaceuticals as well as to their application in pharmacy. Microscopic and phytochemical analyses will be performed and the requirements and analytical methods of the pharmacopoeia will be explained.</p>		
Intended learning outcomes		
<p>Students have acquired a specialist knowledge on active agents from medicinal plants and phytopharmaceuticals as well as on the requirements and analytical methods of the pharmacopoeia.</p>		
Courses (type, number of weekly contact hours, language – if other than German)		
Ü (4) + S (1)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>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</p>		
Allocation of places		
<p>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 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</p>		
minor in a Bachelor's degree programme Biology (2021)		page 85 / 98
JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021		

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

Module title		Abbreviation
Laboratory Practical Course I		07-S1-LP1-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
This practical course is offered by an institution that is part of the University. Contents to be determined by the respective institution.		
Intended learning outcomes		
Students have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
P (5) Module taught in: German and/or English		
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		
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Additional information		
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Workload		
150 h		
Teaching cycle		
--		
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) Biology (2022)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 87 / 98

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

Module title		Abbreviation
Excursion I		07-S1-Ex1-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
Contents of the field trip to be determined by the respective institution.		
Intended learning outcomes		
Students have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
E (2) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. creditable for bonus</p>		
Allocation of places		
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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		
<p>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) Biology (2022)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 89 / 98

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

Module title		Abbreviation
Interdisciplinary Project I		07-S1-IP1-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
Contents of the project to be determined by the competent coordinators; contents will vary according to topic.		
Intended learning outcomes		
Students have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
R (5) Module taught in: German and/or English		
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		
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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)		
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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) Computer Science und Sustainability (2021)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 91 / 98

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

Module title		Abbreviation
Excursion II		07-S2-EX2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
Contents of the field trip to be determined by the respective institution.		
Intended learning outcomes		
Students have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
E (8) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
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Additional information		
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Workload		
300 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		
<p>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) Biology (2022)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 93 / 98

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

Module title		Abbreviation
Interdisciplinary Project II		07-S2-IP2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
Contents of the project to be determined by the competent coordinators; contents will vary according to topic.		
Intended learning outcomes		
Students have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
R (8) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
--		
Additional information		
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Workload		
300 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
--		
Module appears in		
<p>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) Biology (2022)</p>		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 95 / 98

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

Module title		Abbreviation
Laboratory Practical Course II		07-S2-LP2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	Please consult with course advisory service in advance.
Contents		
This practical course is offered by an institution that is part of the University. Contents to be determined by the respective institution.		
Intended learning outcomes		
Students are familiar with the structures of internal institutions and have developed skills which qualify them to work in their profession.		
Courses (type, number of weekly contact hours, language — if other than German)		
P (8) Module taught in: German and/or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>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).</p> <p>Students will be informed about the method and length of the assessment prior to the course. Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
--		
Additional information		
--		
Workload		
300 h		
Teaching cycle		
--		
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)		
minor in a Bachelor's degree programme Biology (2021)	JMU Würzburg • generated 19-Apr-2025 • exam. reg. data record Bachelor (60 ECTS) Biologie - 2021	page 97 / 98

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