

Module Catalogue

for the Module studies (Bachelor)

Biology

Examination regulations version: 2019
Responsible: Faculty of Biology

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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:

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

15-May-2019 (2019-36)

27-Jun-2019 (2019-41)

14-Nov-2019 (2019-52)

22-Jan-2020 (2020-13)

06-May-2020 (2020-39)

22-Jul-2020 (2020-57)

17-Dec-2020 (2020-110)

10-Mar-2021 (2021-17)

09-Jun-2021 (2021-58)

22-Dec-2021 (2021-85)

05-Jul-2022 (2022-52)

31-Jan-2023 (2022-86)

15-Jun-2023 (2023-58)

13-Dec-2023 (2023-107)

07-Aug-2024 (2024-82)

22-Jan-2025 (2025-1)

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.

Summer Term 2019

(ECTS credits)

Module title			Abbreviation
Career Perspectives, Personal Competence and Communication Skills			07-SQF-KEB-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	--	
Contents			
This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.			
Intended learning outcomes			
Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.			
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			
120 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-			

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 title			Abbreviation
Organisation and Safety in Biosciences			07-SQF-OSB-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	--	
Contents			
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.			
Intended learning outcomes			
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus			
Allocation of places			
120 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.			

Biology (2019)

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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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-mo1
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Legal and Ethical Aspects in Biological Sciences		07-SQF-RETH-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		
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) 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Statistics 5		07-SQF-STAT5-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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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 title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
60 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
90 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification in Natural Sciences 6			07-SQF-ZQN6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. 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			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Winter Term 2019

(ECTS credits)

Module title		Abbreviation
Career Perspectives, Personal Competence and Communication Skills		07-SQF-KEB-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	--
Contents		
<p>This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.</p>		
Intended learning outcomes		
<p>Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.</p>		
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		
<p>120 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</p>		

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 title			Abbreviation
Organisation and Safety in Biosciences			07-SQF-OSB-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	--	
Contents			
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.			
Intended learning outcomes			
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus			
Allocation of places			
120 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.			

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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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Legal and Ethical Aspects in Biological Sciences		07-SQF-RETH-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		
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) 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title			Abbreviation
Statistics 5			07-SQF-STAT5-182-m01
Module coordinator		Module offered by	
degree programme coordinator Biologie (Biology)		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Usage of specific statistical methods on practical examples			
Intended learning outcomes			
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.			
Courses (type, number of weekly contact hours, language — if other than German)			
Ü (3) 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification outside Natural Sciences 6			07-SQF-ZQA6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + 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)			
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. 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			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification in Natural Sciences 4			o7-SQF-ZQN4-152-mo1
Module coordinator		Module offered by	
Coordinator BioCareers		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
4	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + S (2) + Ü (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)			
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. Language of assessment: German and/or English 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)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Summer Term 2020

(ECTS credits)

Module title		Abbreviation
Career Perspectives, Personal Competence and Communication Skills		07-SQF-KEB-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	--
Contents		
<p>This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.</p>		
Intended learning outcomes		
<p>Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.</p>		
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		
<p>120 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</p>		

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 title			Abbreviation
Organisation and Safety in Biosciences			07-SQF-OSB-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	--	
Contents			
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.			
Intended learning outcomes			
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus			
Allocation of places			
120 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.			

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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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Legal and Ethical Aspects in Biological Sciences		07-SQF-RETH-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		
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) 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Statistics 5		07-SQF-STAT5-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (0.5) + E (0.5)		
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)		
term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages)		
Language of assessment: German and/or English		
creditable for bonus		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification in Natural Sciences 3			07-SQF-ZQN3-152-m01
Module coordinator		Module offered by	
Coordinator BioCareers		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
3	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
Additional information			
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Workload			
90 h			
Teaching cycle			
--			
Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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 title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-mo1
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
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Workload		
90 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 title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
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 title		Abbreviation
Nature Conservation Biology		07-ASQ-NCB-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + Ü (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)		
Presentation (approx. 30 minutes) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
--		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studyprograms			07-ASQ-VST-201-m01
Module coordinator		Module offered by	
--		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	--	--	
Contents			
--			
Intended learning outcomes			
--			
Courses (type, number of weekly contact hours, language — if other than German)			
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)			
portfolio (approx. 20 hours total)			
Allocation of places			
max. 20 places (Lottery)			
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 title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
--		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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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Winter Term 2020

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Organisation and Safety in Biosciences		07-SQF-OSB-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	--
Contents		
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.		
Intended learning outcomes		
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
<p>120 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.</p>		

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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (0.5) + E (0.5) 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)		
term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
--		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1		
Language of assessment: German and/or English		
creditable for bonus		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title			Abbreviation
Additional Qualification in Natural Sciences 6			07-SQF-ZQN6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Summer Term 2021

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-m01
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
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Workload		
90 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 title			Abbreviation
Career Perspectives, Personal Competence and Communication Skills			07-SQF-KEB-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	--	
Contents			
<p>This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.</p>			
Intended learning outcomes			
<p>Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.</p>			
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			
120 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-			

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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Statistics 5		07-SQF-STAT5-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studypro-grams		07-ASQ-VST-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total)		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title			Abbreviation
Additional Qualification in Natural Sciences 6			07-SQF-ZQN6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. 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			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Winter Term 2021

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Organisation and Safety in Biosciences		07-SQF-OSB-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	--
Contents		
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.		
Intended learning outcomes		
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
<p>120 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.</p>		

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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (0.5) + E (0.5) 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)		
term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title			Abbreviation
Additional Qualification in Natural Sciences 5			07-SQF-ZQN5-152-m01
Module coordinator		Module offered by	
Coordinator BioCareers		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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 title			Abbreviation
Additional Qualification in Natural Sciences 6			o7-SQF-ZQN6-152-mo1
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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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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Summer Term 2022

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-mo1
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
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Workload		
90 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 title		Abbreviation
Career Perspectives, Personal Competence and Communication Skills		07-SQF-KEB-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	--
Contents		
<p>This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.</p>		
Intended learning outcomes		
<p>Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.</p>		
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		
<p>120 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 ha-</p>		

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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-mo1
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 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)		
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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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title			Abbreviation
Statistics 5			07-SQF-STAT5-182-m01
Module coordinator		Module offered by	
degree programme coordinator Biologie (Biology)		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Usage of specific statistical methods on practical examples			
Intended learning outcomes			
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.			
Courses (type, number of weekly contact hours, language — if other than German)			
Ü (3) 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studypro-grams		07-ASQ-VST-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total)		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification outside Natural Sciences 6			07-SQF-ZQA6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + 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)			
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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
Additional information			
--			
Workload			
150 h			
Teaching cycle			
--			
Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
60 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification in Natural Sciences 4			07-SQF-ZQN4-152-m01
Module coordinator		Module offered by	
Coordinator BioCareers		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
4	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + S (2) + Ü (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)			
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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
Additional information			
--			
Workload			
120 h			
Teaching cycle			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Winter Term 2022

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Organisation and Safety in Biosciences		07-SQF-OSB-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	--
Contents		
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.		
Intended learning outcomes		
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
<p>120 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.</p>		

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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (0.5) + E (0.5) 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)		
term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1		
Language of assessment: German and/or English		
creditable for bonus		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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 title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
60 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
90 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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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Summer Term 2023

(ECTS credits)

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 title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-mo1
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
--		
Workload		
90 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 title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
--		
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 title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
--		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
--		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studypro-grams		07-ASQ-VST-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total)		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Basics in Biology		07-GBio-212-m01
Module coordinator		Module offered by
Ricarda Scheiner		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		
Introduction into basic aspects in biology		
Intended learning outcomes		
Students are able to understand basic concepts in biology and are able to describe biological principles in the fields of cytology, morphology, physiology, developmental biology, evolution, genetics, microbiology and ecology using selected examples. They understand basic biological principles and rules and can recognize them in biological examples.		
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. 60 minutes)		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Basic Human Biology I - GY		07-LA-HUBIO-1-152-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 be divided up into three sections covering the following topics:</p> <ul style="list-style-type: none"> • human genetics (genetic disease, inheritance), • human physiology (human sensory physiology, nutrition, maintaining physical health), • human developmental physiology (sex organs, impregnation, embryonic development, evolutionary history of modern humans). 		
Intended learning outcomes		
<ul style="list-style-type: none"> • Familiarity with the fundamental principles of human genetics 		
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)		
<p>written examination (approx. 60 to 90 minutes)</p> <p>creditable for bonus</p>		
Allocation of places		
--		
Additional information		
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Workload		
180 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 61 I Nr. 5		

Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Career Perspectives, Personal Competence and Communication Skills		07-SQF-KEB-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	--
Contents		
<p>This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.</p>		
Intended learning outcomes		
<p>Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.</p>		
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		
<p>120 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</p>		

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 title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Statistics 5		07-SQF-STAT5-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (0.5) + E (0.5) 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)		
term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification outside Natural Sciences 6			07-SQF-ZQA6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + 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)			
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. 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			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
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 title			Abbreviation
Additional Qualification in Natural Sciences 6			07-SQF-ZQN6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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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Winter Term 2023

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics in Biology		07-GBio-212-m01
Module coordinator		Module offered by
Ricarda Scheiner		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		
Introduction into basic aspects in biology		
Intended learning outcomes		
Students are able to understand basic concepts in biology and are able to describe biological principles in the fields of cytology, morphology, physiology, developmental biology, evolution, genetics, microbiology and ecology using selected examples. They understand basic biological principles and rules and can recognize them in biological examples.		
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. 60 minutes)		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Organisation and Safety in Biosciences			07-SQF-OSB-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	--	
Contents			
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.			
Intended learning outcomes			
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus			
Allocation of places			
120 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.			

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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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>S (2) Module taught in: German and/or English</p>		
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>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification outside Natural Sciences 6			07-SQF-ZQA6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + 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)			
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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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 title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
60 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
90 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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 title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Summer Term 2024

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 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		
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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 title		Abbreviation
Basics in Biology		07-GBio-212-m01
Module coordinator		Module offered by
Ricarda Scheiner		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		
Introduction into basic aspects in biology		
Intended learning outcomes		
Students are able to understand basic concepts in biology and are able to describe biological principles in the fields of cytology, morphology, physiology, developmental biology, evolution, genetics, microbiology and ecology using selected examples. They understand basic biological principles and rules and can recognize them in biological examples.		
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. 60 minutes)		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-mo1
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
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Workload		
90 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 title		Abbreviation
Basic Human Biology I - GY		07-LA-HUBIO-1-152-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 be divided up into three sections covering the following topics:</p> <ul style="list-style-type: none"> • human genetics (genetic disease, inheritance), • human physiology (human sensory physiology, nutrition, maintaining physical health), • human developmental physiology (sex organs, impregnation, embryonic development, evolutionary history of modern humans). 		
Intended learning outcomes		
<ul style="list-style-type: none"> • Familiarity with the fundamental principles of human genetics 		
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)		
<p>written examination (approx. 60 to 90 minutes)</p> <p>creditable for bonus</p>		
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)		
§ 61 I Nr. 5		

Module title			Abbreviation
Career Perspectives, Personal Competence and Communication Skills			07-SQF-KEB-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	--	
Contents			
This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.			
Intended learning outcomes			
Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.			
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			
120 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-			

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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-mo1
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title			Abbreviation
Statistics 5			07-SQF-STAT5-182-m01
Module coordinator		Module offered by	
degree programme coordinator Biologie (Biology)		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Usage of specific statistical methods on practical examples			
Intended learning outcomes			
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.			
Courses (type, number of weekly contact hours, language — if other than German)			
Ü (3) 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
10 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 title		Abbreviation
Taxonomy and Biology of Butterflies		07-SQF-BUFLY-182-m01
Module coordinator		Module offered by
degree programme coordinator 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	--
Contents		
Taxonomy of butterflies and moth. Preparation of butterflies. Ecology and relevance. Developmental biology and developmental strategies of butterflies. Field excursions. Development of wingcolors. Species determination of moth using light traps. Exotic butterflies.		
Intended learning outcomes		
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studypro-grams		07-ASQ-VST-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total)		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
--		
Intended learning outcomes		
--		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
<p>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1 Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 6		07-SQF-ZQA6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Winter Term 2024

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.</p>		
Intended learning outcomes		
<p>Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>V (2) Module taught in: German and/or English</p>		
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) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English</p>		
Allocation of places		
max. 20 places (lottery)		
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 title		Abbreviation
Basics in Biology		07-GBio-212-m01
Module coordinator		Module offered by
Ricarda Scheiner		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		
Introduction into basic aspects in biology		
Intended learning outcomes		
Students are able to understand basic concepts in biology and are able to describe biological principles in the fields of cytology, morphology, physiology, developmental biology, evolution, genetics, microbiology and ecology using selected examples. They understand basic biological principles and rules and can recognize them in biological examples.		
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. 60 minutes)		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Science experiments		07-ASQ-NIE-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, winter term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Organisation and Safety in Biosciences			07-SQF-OSB-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	--	
Contents			
Safety procedures in the biosciences, in particular radiation protection, handling of genetically modified organisms, hygiene procedures and hazardous substances, working with lab animals. Fundamental concepts that help ensure an effective and efficient workflow in the biosciences. Structure and organisation of institutions in the bioscience/biotech sector. Process-based project management. HR management in the biosciences, responsibilities of managers/supervisors, appraisal interviews, target agreements, management styles.			
Intended learning outcomes			
Students have developed a fundamental knowledge of the regulations governing work in the bioscience sector and are familiar with fundamental organisational principles that are relevant for work in research and production. They are also familiar with fundamental principles of process-based project work in the biosciences.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (1) + 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 (60 minutes) Language of assessment: German and/or English creditable for bonus			
Allocation of places			
120 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.			

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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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1		
Language of assessment: German and/or English		
creditable for bonus		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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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Summer Term 2025

(ECTS credits)

Module title		Abbreviation
How to excel in the Bioscience		07-ASQ-eBio-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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Series of workshops on a variety of topics in the area of transferable skills: What does it take to succeed at university? What skills (both subject-specific and transferable) do you need to be successful in a STEM career once you have completed your BSc/MSc degree: ability to define and achieve goals (good self and time management); How do you develop a research question/hypothesis, how do you structure a coherent analysis? How do you integrate your own findings into a bigger picture? Concrete transferable skills that will help you launch a successful career: a team player with leadership skills needs assertiveness, negotiation and conflict management skills and the ability to structure workflows. The importance of writing/English writing skills in science: an English writing lab will provide you with an opportunity to enhance your writing skills. Most of the workshops will be taught by Ms Rapp-Galmiche and qualified student tutors, but we might also invite external experts to deliver talks.		
Intended learning outcomes		
Students have acquired skills that will help them succeed at university and decide what career to pursue: They are able to define goals, know what interdisciplinary skills they need for a successful career in the biosciences and are familiar with techniques that will help them develop these skills. Students are able to describe projects, research findings and scientific issues in English in a clear and convincing style.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 20 places (lottery)		
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 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		
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Workload		
150 h		
Teaching cycle		
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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 title		Abbreviation
Basics in Biology		07-GBio-212-m01
Module coordinator		Module offered by
Ricarda Scheiner		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		
Introduction into basic aspects in biology		
Intended learning outcomes		
Students are able to understand basic concepts in biology and are able to describe biological principles in the fields of cytology, morphology, physiology, developmental biology, evolution, genetics, microbiology and ecology using selected examples. They understand basic biological principles and rules and can recognize them in biological examples.		
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. 60 minutes)		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
Teaching cycle: every semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)		07-ASQ-GTB-182-mo1
Module coordinator		Module offered by
holder of the Chair of Biotechnology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
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.		
Intended learning outcomes		
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.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
presentation (20 to 30 minutes) Language of assessment: German and/or English		
Allocation of places		
min. 5, max. 20 places (lot)		
Additional information		
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Workload		
90 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 title		Abbreviation
Basic Human Biology I - GY		07-LA-HUBIO-1-152-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 be divided up into three sections covering the following topics:</p> <ul style="list-style-type: none"> • human genetics (genetic disease, inheritance), • human physiology (human sensory physiology, nutrition, maintaining physical health), • human developmental physiology (sex organs, impregnation, embryonic development, evolutionary history of modern humans). 		
Intended learning outcomes		
<ul style="list-style-type: none"> • Familiarity with the fundamental principles of human genetics 		
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)		
<p>written examination (approx. 60 to 90 minutes)</p> <p>creditable for bonus</p>		
Allocation of places		
--		
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)		
§ 61 I Nr. 5		

Module title			Abbreviation
Career Perspectives, Personal Competence and Communication Skills			07-SQF-KEB-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	--	
Contents			
This module will provide students with information on potential areas of employment for life scientists and will address the topic of job application and staff selection. It will discuss methods for analysing personality types and will acquaint students with criteria for developing personal and social skills. Building on this, the module will develop fundamental criteria for working in groups and teams. The fundamental principles of a project-oriented approach to work and of communication (incl. rhetoric and body language) will be discussed. Students will also receive advice on how to design and structure talks.			
Intended learning outcomes			
Students know what it takes to succeed in the job market. They are familiar with current developments in the job market, know how to go job hunting, and are familiar with recruitment practices of employers. Students have developed a fundamental knowledge of personality assessment methods and are familiar with conflict management methods. They are able to work in a team-based environment and have developed a fundamental knowledge of project management methods and approaches. Students have enhanced their teaching skills and are proficient in the theory and practice of communication. They know how to design and structure talks as well as to present data in both oral and written form. Students are aware of what body language may communicate.			
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			
120 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-			

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 title		Abbreviation
Methods and tools for Nature- and Environmental Education 1		07-LLG-M1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Methods and tools for Nature- and Environmental Education 2		07-LLG-M2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chalk and talk teaching, carousel activities, unguided experimentation. There are many ways to communicate knowledge to groups of pupils. Out-of-classroom learning has been gaining in importance. In interdisciplinary contexts, it is particularly important to draw attention to the fact that looking at a topic from a "different" point of view may facilitate learning. This course will provide students with a practical introduction to knowledge-based and experience-based learning methods. Some of these methods will be adapted to be appropriate for specific topics and will be implemented with groups of pupils. This course will present students with an opportunity to find out what methods they feel comfortable with and whether students like or dislike the respective methods.		
Intended learning outcomes		
Students are familiar with practical methods for teaching groups in an effective and lively way.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Experience nature outdoors		07-ASQ-NIF-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
Portfolio (approx. 15 pages) Assessment offered: Once a year, summer term		
Allocation of places		
min. 5, max. 20 places (Lottery)		
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 title		Abbreviation
Fungi: One kingdom, many faces		07-SQF-FUNGI-182-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		
The course provides a concise overview of fungal systematics, cell biology, fungal genetics, plant pathogenicity, medical mycology, stimulus processing, and fungi in biotechnology. In the seminar current research topics will be presented and discussed. The exercise includes the microscopy of selected fungi / cultivation and preparation of media / day excursion "mushroom" and determination of collected material. The excursion depends on weather conditions.		
Intended learning outcomes		
The students are able to identify key characteristics of fungi and classify them accordingly. In addition, they possess knowledge on mushroom biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (4) 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. 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 title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1		07-LLG-P1-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2		07-LLG-P2-202-m01
Module coordinator		Module offered by
head of group Didactics of Biology		Botanical Garden
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
This course will provide students with an opportunity to take on the role of teacher and work with real groups of pupils. Particular emphasis will be placed on the presentation of topics; in many cases the presentation will be accompanied by a demonstration to illustrate the topics. Students will either teach existing topics they adapted to fit the needs of their target groups or will develop new topics.		
Intended learning outcomes		
Students are able to teach groups, communicating in practice what they have learned in theory.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)		
Allocation of places		
max. 12 places. Places will be allocated primarily according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.		
Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Computer languages and programming 3		07-SQF-PRO3-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title		Abbreviation
Computer languages and programming 5		07-SQF-PRO5-182-m01
Module coordinator		Module offered by
chairperson of examination committee Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.		
Intended learning outcomes		
The participants know the basics about computer languages and programming.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (3) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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 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 title		Abbreviation
Statistics 3		07-SQF-STAT3-182-m01
Module coordinator		Module offered by
degree programme coordinator Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Usage of specific statistical methods on practical examples		
Intended learning outcomes		
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
10 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

90 h

Teaching cycle

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

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Module title			Abbreviation
Statistics 5			07-SQF-STAT5-182-m01
Module coordinator		Module offered by	
degree programme coordinator Biologie (Biology)		Faculty of Biology	
ECTS	Method of grading	Only after succ. compl. of module(s)	
5	(not) successfully completed	--	
Duration	Module level	Other prerequisites	
1 semester	undergraduate	--	
Contents			
Usage of specific statistical methods on practical examples			
Intended learning outcomes			
The participants know how to evaluate data statistically and how to use statistic methods in practical examples.			
Courses (type, number of weekly contact hours, language — if other than German)			
Ü (3) 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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
10 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 title		Abbreviation
Environmental Education in the Botanic Garden of Würzburg University		07-SQF-UBG-152-m01
Module coordinator		Module offered by
head of Botanical Garden		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>The Botanical Garden of the University of Würzburg is primarily used for teaching and research-related activities. In addition, it is used for activities in the area of general environmental education with the plants in the different sections and collections being used to inform interested members of the public about topics in the areas of botany, ecology and gardening. In this module, students will develop appropriate educational concepts for imparting, in a comprehensible way, specialist knowledge to interested laypersons. They will practise designing and using appropriate aids (information boards, leaflets etc.) and applying methodological approaches (guidelines) for the comprehensible presentation of complex concepts. Students will be organised into teams to complete the following tasks: develop contents tailored to the needs of selected target groups, acquire the specialist knowledge necessary for presenting these contents, select appropriate methods for presenting these contents.</p>		
Intended learning outcomes		
<p>Students will be able to communicate concepts in ecology and botany to a lay audience. They will be able to tailor contents to a target audience, selecting and using appropriate aids and techniques. Students will have acquired an overview of the sectors of the Botanical Garden and will be able to prepare information material on individual sections. They will have developed both botanical knowledge and teaching skills that will enable them to guide tours through the Botanical Garden, imparting knowledge in a way that is tailored to their target audience.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
<p>Ü (0.5) + E (0.5) Module taught in: German and/or English</p>		
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>term paper (or preparing educational materials and materials for demonstrations) (approx. 10 to 20 pages) Language of assessment: German and/or English creditable for bonus</p>		
Allocation of places		
6 places.		
Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of inorganic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VAC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of Statistics for students in Biology and MINT studypro-grams		07-ASQ-VST-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total)		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Orientation/Review of Mathematics for students in Biology and MINT study-programs		07-ASQ-VM-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
--		
Allocation of places		
--		
Additional information		
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Workload		
150 h		
Teaching cycle		
Teaching cycle: every year, winter semester		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Orientation/Review of organic Chemistry for students in Biology and MINT studyprograms		07-ASQ-VOC-201-m01
Module coordinator		Module offered by
--		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	--	--
Contents		
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Intended learning outcomes		
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Courses (type, number of weekly contact hours, language — if other than German)		
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)		
portfolio (approx. 20 hours total) Assessment offered: Once a year, summer term		
Allocation of places		
max. 20 places (Lottery)		
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 title		Abbreviation
Publishing Scientific Data		07-SQF-WIP-152-mo1
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Either alone or in small groups of two or three persons, students will select several journal articles from the field of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three "core publications" as a basis, students will search data bases (e. g. PubMed) for literature that is directly related to these articles. The most important current original publications will be summed up in a review article; where applicable, students may also use their own raw data. The structure of this review article will comply with the standards of the scientific community as defined in the instructions to authors of a scientific journal. The article will contain at least one figure, one table as well as one schematic representation of the contents and will be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investigated, summary of results as well as current developments and discussion thereof. The article will also contain citations in the specified format. Students will also deliver a presentation on the contents of the article.</p>		
Intended learning outcomes		
<p>Students will have learned to conduct a literature search on a specific topic. They will know how to get an overview of recent publications on a specific topic and will be familiar with basic rules for summing up original publications in a review article complying with the standards of the scientific community. Students will be familiar with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deliver an oral presentation on raw scientific data.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1		
Language of assessment: German and/or English		
creditable for bonus		
Allocation of places		
<p>30 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>		

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

90 h

Teaching cycle

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

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Module title		Abbreviation
Writing Effectively in English - MINT/STEM and Medical Faculties		07-ASQ-WEE-181-mo1
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	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Seminar and workshops covering common mistakes in scientific papers and common writing mistakes in English. Upon request, students will also be given the opportunity to enhance their presentation skills in English. Workshops and seminars will be taught by trained tutors. External lecturers may be invited to speak on specific topics.		
Intended learning outcomes		
Scientific writing skills in English. Students are able to communicate project descriptions as well as lab results and hypotheses effectively and convincingly in English. Students can create an outline and are aware of common ESL (English as a second language) mistakes. Students have learned how to handle general writing problems, such as writer's block.		
Courses (type, number of weekly contact hours, language — if other than German)		
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)		
a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English		
Allocation of places		
max. 15 places (lottery)		
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 title		Abbreviation
Additional Qualification outside Natural Sciences 2		07-SQF-ZQA2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include 2 to 3 all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
60 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 3		07-SQF-ZQA3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 1 weekly contact hour.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 4		07-SQF-ZQA4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include one week of all-day courses.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1.5) 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. Language of assessment: German and/or English 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)		
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Module title		Abbreviation
Additional Qualification outside Natural Sciences 5		07-SQF-ZQA5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in areas other than the natural sciences that are not offered as part of the pool of general transferable skills (ASQ) and that provide students with an opportunity to strengthen their general background in the natural sciences. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee. Will include courses with 2 weekly contact hours.		
Intended learning outcomes		
Students have expanded their interdisciplinary knowledge and have thus enhanced their general scientific skills. They have acquired additional expertise and have developed additional skills in areas other than biology.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + 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)		
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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title			Abbreviation
Additional Qualification outside Natural Sciences 6			07-SQF-ZQA6-152-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	--	
Contents			
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.			
Intended learning outcomes			
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.			
Courses (type, number of weekly contact hours, language — if other than German)			
V (0.5) + 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)			
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. Language of assessment: German and/or English creditable for bonus			
Allocation of places			
--			
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 title		Abbreviation
Additional Qualification in Natural Sciences 2		07-SQF-ZQN2-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
2	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (0.5) + Ü (0.5) 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
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Workload		
60 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 3		07-SQF-ZQN3-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 4		07-SQF-ZQN4-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (0.5) + S (2) + Ü (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)		
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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
120 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 5		07-SQF-ZQN5-152-m01
Module coordinator		Module offered by
Coordinator BioCareers		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. Language of assessment: German and/or English creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module title		Abbreviation
Additional Qualification in Natural Sciences 6		07-SQF-ZQN6-152-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	--
Contents		
Courses in the natural sciences not offered as part of the pool of general transferable skills (ASQ) that equip students with advanced knowledge in the natural sciences that is related to their discipline. These courses may be offered by the University of Würzburg or by external institutions. Decision on credit transfer to be made by examination committee.		
Intended learning outcomes		
Students have developed an improved scientific knowledge and have thus enhanced their specific qualifications. They have acquired additional expertise that will help them specialise in their field.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + S (1) + Ü (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. 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. 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		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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