Module Catalogue
for the Module studies (Bachelor)

Biology

Examination regulations version: 2019
Responsible: Faculty of Biology
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Abbreviations used, Conventions, Notes, In accordance with

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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)
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
(0 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  

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**Duration** | **Module level**  
---|---  
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-
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**

**Referred to in LPO I** (examination regulations for teaching-degree programmes)
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<td>Coordinator BioCareers</td>
<td>Faculty of Biology</td>
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**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 Biologie (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.

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

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<td>holder of the Chair of Biotechnology and Biophysics</td>
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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)

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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)

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

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer languages and programming 3</td>
<td>07-SQF-PRO3-182-m01</td>
</tr>
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<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>chairperson of examination committee Biologie (Biology)</td>
<td>Faculty of Biology</td>
</tr>
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<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>(not) successfully completed</td>
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<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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<table>
<thead>
<tr>
<th>Contents</th>
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<tbody>
<tr>
<td>Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
</tr>
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<tbody>
<tr>
<td>The participants know the basics about computer languages and programming.</td>
</tr>
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<table>
<thead>
<tr>
<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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<tbody>
<tr>
<td>Ü (1)</td>
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</table>
Module taught in: German and/or English

<table>
<thead>
<tr>
<th>Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
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</table>

<table>
<thead>
<tr>
<th>Allocation of places</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Additional information</th>
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<table>
<thead>
<tr>
<th>Referred to in LPO I (examination regulations for teaching-degree programmes)</th>
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<tbody>
<tr>
<td>--</td>
</tr>
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</table>
Module title
Computer languages and programming 5

Abbreviation
07-SQF-PRO5-182-m01

Module coordinator
chairperson of examination committee Biologie (Biology)

Module offered by
Faculty of Biology

ECTS
5

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Legal and Ethical Aspects in Biological Sciences</td>
<td>07-SQF-RETH-152-m01</td>
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**Module coordinator**
Dean of Studies Biologie (Biology)

**Module offered by**
Faculty of Biology

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<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
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</tbody>
</table>

**Duration**
1 semester

**Module level**
undergraduate

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

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<table>
<thead>
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<th>Module title</th>
<th>Abbreviation</th>
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<td>Statistics 3</td>
<td>07-SQF-STAT3-182-m01</td>
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<tbody>
<tr>
<td>degree programme coordinator Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<tr>
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<table>
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<tr>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

**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)

<table>
<thead>
<tr>
<th>Ü (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module taught in: German and/or English</td>
</tr>
</tbody>
</table>

**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

**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 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.

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

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<table>
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<th>Module title</th>
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<tr>
<td>Statistics 5</td>
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<td>degree programme coordinator Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
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<table>
<thead>
<tr>
<th>Duration</th>
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<tbody>
<tr>
<td>1 semester</td>
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</tr>
</tbody>
</table>

**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)

<table>
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<th>Ü (3)</th>
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<tbody>
<tr>
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</table>

**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).

**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 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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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  
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  

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  
--  

Additional information  
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Referred to in LPO I (examination regulations for teaching-degree programmes)  
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Module title
Environmental Education in the Botanic Garden of Würzburg University

Abbreviation
07-SQF-UBG-152-m01

Module coordinator
head of Botanical Garden

Module offered by
Faculty of Biology

ECTS
2

Method of grading
Only after succ. compl. of module(s)

(not) successfully completed
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

Contents
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.

Intended learning outcomes
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.

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Publishing Scientific Data</td>
<td>07-SQF-WIP-152-m01</td>
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<tbody>
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<td>BioCareers</td>
<td>Faculty of Biology</td>
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<th>Other prerequisites</th>
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<td>3</td>
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<th>Module level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

### Contents

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.

### Intended learning outcomes

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.

### Courses

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<th>type, number of weekly contact hours, language — if other than German</th>
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Module taught in: German and/or English

### Method of assessment

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<tbody>
<tr>
<td>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1</td>
</tr>
</tbody>
</table>

creditable for bonus

### Allocation of places

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.
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

Referred to in LPO I (examination regulations for teaching-degree programmes)
Module title: Additional Qualification outside Natural Sciences 2
Abbreviation: 07-SQF-ZQA2-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 2
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate

Other prerequisites: --

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:
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:
--

Additional information:
--

Referred to in LPO I (examination regulations for teaching-degree programmes):
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Module title
Additional Qualification outside Natural Sciences 3

Module coordinator
Coordinator BioCareers

ECTS
3

Duration
1 semester

Module offered by
Faculty of Biology

Abbreviation
07-SQF-ZQA3-152-m01

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
--

Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<td>Faculty of Biology</td>
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<th>Method of grading</th>
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**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)

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<tr>
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<td>V</td>
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<td>S</td>
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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**

--

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

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Module title
Additional Qualification outside Natural Sciences 6

Abbreviation
07-SQF-ZQA6-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
5

Method of grading
numerical grade

Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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).
Language of assessment: German and/or English creditable for bonus

Allocation of places
--

Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module title: Additional Qualification in Natural Sciences 2
Abbreviation: 07-SQF-ZQN2-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 2
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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:
V (0.5) + S (0.5) + Ü (0.5)
Module taught in: German and/or English

Method of assessment:
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

Allocation of places:
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Additional information:
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Referred to in LPO I (examination regulations for teaching-degree programmes):
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**Module coordinator**

Coordinator BioCareers

**Module offered by**

Faculty of Biology

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</table>

**Duration**

1 semester

**Module level**

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

--
### Module title

Additional Qualification in Natural Sciences 5

### Abbreviation

07-SQF-ZQN5-152-m01

### Module coordinator

Coordinator BioCareers

### Module offered by

Faculty of Biology

### ECTS

5

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### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

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### 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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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**Module coordinator**

Coordinator BioCareers

**Module offered by**

Faculty of Biology

**ECTS** | **Method of grading** | **Other prerequisites**
---|-----------------------|---------------------|
5 | numerical grade | -- |

**Duration** | **Module level**
---|---|
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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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

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**Module coordinator**

BioCareers

**Module offered by**

Faculty of Biology

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<tbody>
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<td>1 semester</td>
<td>undergraduate</td>
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</table>

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

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Module title
Organisation and Safety in Biosciences

Abbreviation
07-SQF-OSB-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
5

Method of grading
numerical grade

Only after succ. compl. of module(s)
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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.
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

Referred to in LPO I (examination regulations for teaching-degree programmes)
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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</thead>
<tbody>
<tr>
<td>Fungi: One kingdom, many faces</td>
<td>07-SQF-FUNGI-182-m01</td>
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<thead>
<tr>
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<tbody>
<tr>
<td>holder of the Chair of Biotechnology and Biophysics</td>
<td>Faculty of Biology</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

**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**

(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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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

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<table>
<thead>
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<th>Module title</th>
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<tbody>
<tr>
<td>Computer languages and programming 3</td>
<td>07-SQF-PRO3-182-m01</td>
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<tr>
<td>chairperson of examination committee Biologie (Biologie)</td>
<td>Faculty of Biology</td>
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<th>Method of grading</th>
<th>Other prerequisites</th>
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<td>3</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
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<tbody>
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<td>1 semester</td>
<td>undergraduate</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
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</thead>
<tbody>
<tr>
<td>Computer languages and programming using one or more computer languages like Java, C, C++, C#, Python, PHP.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
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</thead>
<tbody>
<tr>
<td>The participants know the basics about computer languages and programming.</td>
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</table>

<table>
<thead>
<tr>
<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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<tr>
<td>Ü (1)</td>
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<tr>
<td>Module taught in: German and/or English</td>
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<table>
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<tr>
<th>Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
</tr>
<tr>
<td>Students will be informed about the method and length of the assessment prior to the course.</td>
</tr>
<tr>
<td>Language of assessment: German and/or English</td>
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<tr>
<td>creditable for bonus</td>
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</table>

<table>
<thead>
<tr>
<th>Allocation of places</th>
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</thead>
<tbody>
<tr>
<td>10 places. Should the number of applications exceed the number of available places, places will be allocated as follows:</td>
</tr>
<tr>
<td>Students of the Bachelor's degree subject Biologie (Biologie) 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 (Biologie) with 180 ECTS credits and 5% of places (a minimum of one place in total) will be allocated to students of the Bachelor's degree subjects Computational Mathematics and 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.</td>
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<tr>
<td>A waiting list will be maintained and places re-allocated as they become available.</td>
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| 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 (Biologie) (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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Computer languages and programming 5</td>
<td>07-SQF-PRO5-182-m01</td>
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<th>Module coordinator</th>
<th>Module offered by</th>
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<tr>
<td>chairperson of examination committee Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
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<tr>
<th>Duration</th>
<th>Module level</th>
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</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

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

(3)

Module taught in: German and/or English

Method of assessment

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

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

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Module title

Legal and Ethical Aspects in Biological Sciences

Abbreviation

07-SQF-RETH-152-m01

Module coordinator

Dean of Studies Biologie (Biology)

Module offered by

Faculty of Biology

ECTS

5

Method of grading

Only after succ. compl. of module(s)

numerical grade

--

Duration

1 semester

Module level

undergraduate

Other prerequisites

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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Referred to in LPO I

(examination regulations for teaching-degree programmes)

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<td>degree programme coordinator Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</tbody>
</table>

**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)

<table>
<thead>
<tr>
<th>Ü (1)</th>
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<tbody>
<tr>
<td>Module taught in: German and/or English</td>
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</table>

**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)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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 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.

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<tr>
<th>Additional information</th>
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<td>Module title</td>
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<td>degree programme coordinator Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<tr>
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</tbody>
</table>

**Contents**

Usage of specific statistical methods on practical examples

**Intended learning outcomes**

The participants know how to evaluate data statistically and how to use statistical methods in practical examples.

**Courses**

(week, number of weekly contact hours, language — if other than German)

<table>
<thead>
<tr>
<th>Ü (3)</th>
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<tbody>
<tr>
<td>Module taught in: German and/or English</td>
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</tbody>
</table>

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

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<td>Taxonomy and Biology of Butterflies</td>
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<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
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<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### 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

- Ü (4)
  - Module taught in: German and/or English

### Method of assessment

- 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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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Module title
Environmental Education in the Botanic Garden of Würzburg University

Abbreviation
07-SQF-UBG-152-m01

Module coordinator
head of Botanical Garden

Module offered by
Faculty of Biology

ECTS
2

Method of grading
Only after succ. compl. of module(s)

Not (not) successfully completed
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

Contents
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.

Intended learning outcomes
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.

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module title: Publishing Scientific Data

Abbreviation: 07-SQF-WIP-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 3
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

Contents:
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.

Intended learning outcomes:
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.

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

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Module title | Additional Qualification outside Natural Sciences 2
---|---
Abbreviation | 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
--

Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module title: Additional Qualification outside Natural Sciences 3
Abbreviation: 07-SQF-ZQA3-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 3
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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:
V (0.5) + S (1)
Module taught in: German and/or English

Method of assessment:
(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).

Language of assessment: German and/or English
creditable for bonus

Allocation of places:
--

Additional information:
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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
Coordinator BioCareers

Module offered by
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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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## Additional Qualification outside Natural Sciences 5

<table>
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### Module coordinator
Coordinator BioCareers

### Module offered by
Faculty of Biology

### ECTS

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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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

<table>
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<th>Type, number of weekly contact hours, language — if other than German</th>
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<tbody>
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<td>V (0.5) + S (2)</td>
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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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### Referred to in LPO I
(examination regulations for teaching-degree programmes)
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### Module title
Additional Qualification outside Natural Sciences 6

### Abbreviation
07-SQF-ZQA6-152-m01

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<td>Faculty of Biology</td>
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<th>Method of grading</th>
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<tr>
<th>Duration</th>
<th>Module level</th>
</tr>
</thead>
<tbody>
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### 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)

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<td>S</td>
<td>(2)</td>
<td>German and/or English</td>
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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
--

### Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module title: Additional Qualification in Natural Sciences 2
Abbreviation: 07-SQF-ZQN2-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 2
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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:
V (0.5) + S (0.5) + Ü (0.5)
Module taught in: German and/or English

Method of assessment:
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

Allocation of places:
--

Additional information:
--

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: BioCareers
Module offered by: Faculty of Biology

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<td>undergraduate</td>
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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
V (0.5) + S (1) + Ü (1)
Module taught in: German and/or English

Method of assessment
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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title
Additional Qualification in Natural Sciences 4

Abbreviation
07-SQF-ZQN4-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
4

Method of grading
Only after succ. compl. of module(s)

(not) successfully completed
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
--

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

Allocation of places
--

Additional information
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
## Additional Qualification in Natural Sciences 6

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Qualification in Natural Sciences 6</td>
<td>07-SQF-ZQN6-152-m01</td>
</tr>
</tbody>
</table>

### Module coordinator
Coordinator BioCareers

### Module offered by
Faculty of Biology

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Method of grading
- Only after succ. compl. of module(s)

### 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
- V (1) + S (1) + Ü (1)
Module taught in: German and/or English

### Method of assessment
- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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

### Allocation of places
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### Additional information
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### Referred to in LPO I
(examination regulations for teaching-degree programmes)

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Summer Term 2020
(o 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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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

<table>
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<td>numerical grade</td>
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</tbody>
</table>

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.
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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.

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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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**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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module Catalogue for the Module studies (Bachelor)  
Biology

<table>
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<td>chairperson of examination committee Biologie (Biology)</td>
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<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</tr>
</tbody>
</table>

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

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<table>
<thead>
<tr>
<th>Module title</th>
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<td>chairperson of examination committee Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<th>ECTS</th>
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<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**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)

<table>
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<th>Ü (3)</th>
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</thead>
<tbody>
<tr>
<td>Module taught in: German and/or English</td>
</tr>
</tbody>
</table>

**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 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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**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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Referred to in LPO I (examination regulations for teaching-degree programmes)
--
**Module title**  
Statistics 3  

**Abbreviation**  
07-SQF-STAT3-182-m01

**Module coordinator**  
degree programme coordinator Biologie (Biology)

**Module offered by**  
Faculty of Biology

**ECTS**  
3

**Method of grading**  
Only after succ. compl. of module(s)

**Duration**  
1 semester

**Module level**  
undergraduate

**Other prerequisites**  
--

**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)

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

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### Module Catalogue for the Module studies (Bachelor)

**Biology**

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<th>Abbreviation</th>
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<td>degree programme coordinator Biologie (Biology)</td>
<td>Faculty of Biology</td>
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**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 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**

---

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

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Module Catalogue for the Module studies (Bachelor) Biology

<table>
<thead>
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<th>Module title</th>
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<td>Faculty of Biology</td>
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</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</tbody>
</table>

**Contents**


**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**

--

**Additional information**

--

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

--
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

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Contents

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.

Intended learning outcomes

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.

Courses

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Module taught in: German and/or English

Method of assessment

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</thead>
<tbody>
<tr>
<td>term paper or preparing educational materials and materials for demonstrations (approx. 10 to 20 pages)</td>
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Language of assessment: German and/or English creditable for bonus

Allocation of places

6 places.

Additional information

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

--
Module title | Abbreviation
---|---
Publishing Scientific Data | 07-SQF-WIP-152-m01

Coordinator | Module offered by
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

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.

Intended learning outcomes

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.

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

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

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Module title
Additional Qualification outside Natural Sciences 2

Abbreviation
07-SQF-ZQA2-152-m01

Module coordinator
BioCareers

Module offered by
Faculty of Biology

ECTS
2

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
V (0.5) + S (0.5)
Module taught in: German and/or English

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

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

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Module title: Additional Qualification outside Natural Sciences 4
Abbreviation: 07-SQF-ZQA4-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 4
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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:
V (0.5) + S (1.5)
Module taught in: German and/or English

Method of assessment:
(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: --

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

V (0.5) + S (2)

Module taught in: German and/or English

**Method of assessment**

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**

--

**Referred to in LPO I**

(examination regulations for teaching-degree programmes)
Module title: Additional Qualification outside Natural Sciences 6

Abbreviation: 07-SQF-ZQA6-152-m01

Module coordinator: BioCareers

Module offered by: Faculty of Biology

ECTS: 5

Method of grading: numerical grade

Duration: 1 semester

Module level: undergraduate

Other prerequisites: --

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:
V (0.5) + S (2)

Module taught in: German and/or English

Method of assessment:

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

Allocation of places:
--

Additional information:
--

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

Additional Qualification in Natural Sciences 2

Abbreviation

07-SQF-ZQN2-152-m01

Module coordinator

Coordinator BioCareers

Module offered by

Faculty of Biology

ECTS

2

Method of grading

Only after succ. compl. of module(s)

Duration

1 semester

Module level

undergraduate

Other prerequisites

--

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

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Module title | Abbreviation
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Additional Qualification in Natural Sciences 3 | 07-SQF-ZQN3-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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### 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

(V (0.5) + S (2) + Ü (2)
Module taught in: German and/or English

### Method of assessment

(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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

--
Module title: Additional Qualification in Natural Sciences 5
Abbreviation: 07-SQF-ZQN5-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 5
Method of grading: Only after succ. compl. of module(s)
Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title: Additional Qualification in Natural Sciences 6
Abbreviation: 07-SQF-ZQN6-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology

ECTS: 5
Method of grading: numerical grade
Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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:
V (1) + S (1) + Ü (1)
Module taught in: German and/or English

Method of assessment:
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

Allocation of places:
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Additional information:
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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How to excel in the Bioscience

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<tr>
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>How to excel in the Bioscience</td>
<td>07-ASQ-eBio-152-m01</td>
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</table>

**Module coordinator**
Dean of Studies Biologie (Biology)

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

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### Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)</td>
<td>07-ASQ-GTB-182-m01</td>
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**Module coordinator**
holder of the Chair of Biotechnology

**Module offered by**
Faculty of Biology

**ECTS**
3

**Method of grading**
Only after succ. compl. of module(s)

**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
--

### 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

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<th>Number of weekly contact hours</th>
<th>Language</th>
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**Method of assessment**

presentation (20 to 30 minutes)

Language of assessment: German and/or English

### Allocation of places

min. 4, max. 20 places (lot)

### Additional information

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

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<th><strong>Module title</strong></th>
<th><strong>Abbreviation</strong></th>
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<td>07-ASQ-WEE-181-m01</td>
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<table>
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<th><strong>Module offered by</strong></th>
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<td>Dean of Studies Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<th><strong>Other prerequisites</strong></th>
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<tr>
<td>1 semester</td>
<td>undergraduate</td>
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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### 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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### Allocation of places

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### Additional information

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

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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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<td>Orientation/Review of organic Chemistry for students in Biology and MINT study programs</td>
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<table>
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<tr>
<th>Intended learning outcomes</th>
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| portfolio (approx. 20 hours total)  
Assessment offered: Once a year, summer term |

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<tr>
<td>max. 20 places (Lottery)</td>
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<table>
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<tr>
<th>Additional information</th>
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Winter Term 2020
(0 ECTS credits)
<table>
<thead>
<tr>
<th>Module title</th>
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<tbody>
<tr>
<td>How to excel in the Bioscience</td>
<td>07-ASQ-eBio-152-m01</td>
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<td>Dean of Studies Biologie (Biology)</td>
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<th>Module level</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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### 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

<table>
<thead>
<tr>
<th>Type</th>
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<th>Language — if other than German</th>
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<tbody>
<tr>
<td>V</td>
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Module taught in: German and/or English

### Method of assessment

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<th>Type</th>
<th>Scope</th>
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<tr>
<td>a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages)</td>
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</table>

Language of assessment: German and/or English

### Allocation of places

max. 20 places (lottery)

### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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<table>
<thead>
<tr>
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<tr>
<td>Portfolio (ca. 15 S.) Assessment offered: Once a year, winter term</td>
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</table>
# Module Catalogue for the Module studies (Bachelor) Biology

## Module title
Organisation and Safety in Biosciences

## Abbreviation
07-SQF-OSB-152-m01

## Module coordinator
Coordinator BioCareers

## Module offered by
Faculty of Biology

## ECTS
5

## Method of grading
Numerical grade

## Only after succ. compl. of module(s)
--

## Duration
1 semester

## Module level
Undergraduate

## Other prerequisites
--

### 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
(V (1) + S (2)

### Method of assessment
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.
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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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module title
Environmental Education in the Botanic Garden of Würzburg University

Abbreviation
07-SQF-UBG-152-m01

Module coordinator
head of Botanical Garden

Module offered by
Faculty of Biology

ECTS
2

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

Contents
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.

Intended learning outcomes
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.

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
(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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>Orientation/Review of inorganic Chemistry for students in Biology and MINT study programs</td>
<td>07-ASQ-VAC-201-m01</td>
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<td>Faculty of Biology</td>
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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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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Publishing Scientific Data

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<tr>
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<th>Abbreviation</th>
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<td>Publishing Scientific Data</td>
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<td>BioCareers</td>
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<th>Duration</th>
<th>Module level</th>
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<tr>
<td>1 semester</td>
<td>undergraduate</td>
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Contents

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.

Intended learning outcomes

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.

Courses

S (2)
Module taught in: German and/or English

Method of assessment

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

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

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Module title: Writing Effectively in English - MINT/STEM and Medical Faculties
Abbreviation: 07-ASQ-WEE-181-m01

Module coordinator: Dean of Studies Biologie (Biology)
Module offered by: Faculty of Biology

ECTS: 5
Method of grading: Only after succ. compl. of module(s)
Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<th>Module title</th>
<th>Abbreviation</th>
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**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

**ECTS** | **Method of grading** | **Other prerequisites** |
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**Duration** | **Module level** |
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<td>1 semester</td>
<td>undergraduate</td>
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**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**
V (0.5) + S (0.5)
Module taught in: German and/or English

**Method of assessment**
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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)
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<td>Coordinator BioCareers</td>
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### 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

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<tr>
<td>V (0.5) + S (1)</td>
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</tbody>
</table>

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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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# Additional Qualification outside Natural Sciences 4

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<td>Additional Qualification outside Natural Sciences 4</td>
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## Module coordinator

Coordinator BioCareers

## Module offered by

Faculty of Biology

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## 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

<table>
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<tr>
<th>Type</th>
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<tr>
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<tr>
<td>S</td>
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Module taught in: German and/or English

## Method of assessment

- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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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## Referred to in LPO I

(examination regulations for teaching-degree programmes)

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<table>
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**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

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**Method of grading**
Only after succ. compl. of module(s)

**Duration**
1 semester

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

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**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**

--

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

--
Module title
Additional Qualification in Natural Sciences 2

Abbreviation
07-SQF-ZQN2-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
2

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
V (0.5) + S (0.5) + Ü (0.5)

Module taught in: German and/or English

Method of assessment
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

Allocation of places
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Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)

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<tbody>
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**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**

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<th>Type</th>
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<td>Ü</td>
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<td>German</td>
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**Module taught in:** German and/or English

**Method of assessment**

- Written examination (approx. 45 to 60 minutes)
- Oral examination of one candidate (approx. 30 minutes)
- Oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- Presentation (approx. 20 to 30 minutes)
- Practical examination (on average approx. 2 hours)

The method and length of the assessment prior to the course will be informed to students. The time to complete will vary according to subject area but will not exceed a maximum of 4 hours. Language of assessment: German and/or English creditable for bonus.

**Allocation of places**

- 

**Additional information**

- 

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

- 

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### Additional Qualification in Natural Sciences 4

**Module title**
Additional Qualification in Natural Sciences 4

**Abbreviation**
07-SQF-ZQN4-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

**ECTS**
4

**Method of grading**
Only after succ. compl. of module(s)

**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
--

### 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

<table>
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<tr>
<th>Type</th>
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<td>Ü</td>
<td>2</td>
<td>German/English</td>
<td>Yes</td>
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</table>

**Module taught in:** German and/or English

### Method of assessment

- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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

**Allocation of places**
--

### Additional information
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**Referred to in LPO 1** (examination regulations for teaching-degree programmes)
--
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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title | Abbreviation
---|---
Additional Qualification in Natural Sciences 6 | 07-SQF-QQN6-152-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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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<table>
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<th>Module level</th>
<th>Intended learning outcomes</th>
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<td>1 semester</td>
<td>undergraduate</td>
<td>Students are familiar with practical methods for teaching groups in an effective and lively way.</td>
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**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 reallocated as they become available.

**Additional information**

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

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<table>
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**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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**Module coordinator**  
head of group Didactics of Biology

**Module offered by**  
Botanical Garden

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<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

**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**

--

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

--
Summer Term 2021
(0 ECTS credits)
Module title | Abbreviation
---|---
How to excel in the Bioscience | 07-ASQ-eBio-152-m01

Module coordinator
Dean of Studies Biologie (Biology)

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 | 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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title: Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)

Module coordinator: holder of the Chair of Biotechnology

Module offered by: Faculty of Biology

ECTS: 3

Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester

Module level: undergraduate

Other prerequisites: --

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:
S (2)

Method of assessment:
Presentation (20 to 30 minutes)
Language of assessment: German and/or English

Allocation of places:
min. 4, max. 20 places (lot)

Additional information:
--

Referred to in LPO I:
(examination regulations for teaching-degree programmes)
Module title: Career Perspectives, Personal Competence and Communication Skills
Abbreviation: 07-SQF-KEB-152-m01

Module coordinator: Coordinator BioCareers
Module offered by: Faculty of Biology

ECTS: 5
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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

---
Module title | Methods and tools for Nature- and Environmental Education 1
---|---
Abbreviation | 07-LLG-M1-202-m01

Module coordinator | head of group Didactics of Biology
Module offered by | Botanical Garden

ECTS | 3
Method of grading | Only after succ. compl. of module(s)

Duration | 1 semester
Module level | undergraduate
Other prerequisites | --

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 reallocated as they become available.

Additional information
--

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

Methods and tools for Nature- and Environmental Education 2

Abbreviation

07-LLG-M2-202-m01

Module coordinator

head of group Didactics of Biology

Module offered by

Botanical Garden

ECTS

3

Method of grading

Only after succ. compl. of module(s)

3 (not) successfully completed

Duration

1 semester

Module level

undergraduate

Other prerequisites

--

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

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<th>Module title</th>
<th>Abbreviation</th>
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<td>Experience nature outdoors</td>
<td>07-ASQ-NIF-201-m01</td>
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<td>--</td>
<td>Faculty of Biology</td>
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<th>Other prerequisites</th>
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<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
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<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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<th>Allocation of places</th>
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<tr>
<td>min. 5, max. 20 places (Lottery)</td>
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<tr>
<th>Additional information</th>
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</table>
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

<table>
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<th>ECTS</th>
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<th>Module level</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

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

--

Additional information

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

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<td>Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1</td>
<td>07-LLG-P1-202-m01</td>
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**Module coordinator**

head of group Didactics of Biology

**Module offered by**

Botanical Garden

**ECTS**

3

**Method of grading**

Only after succ. compl. of module(s)

**Duration**

1 semester

**Module level**

undergraduate

**Other prerequisites**

--

**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 reallocated as they become available.

**Additional information**

--

**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

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<table>
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<td>Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2</td>
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**Module coordinator**

head of group Didactics of Biology

**Module offered by**

Botanical Garden

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<th>ECTS</th>
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</table>

**Duration**

1 semester

**Module level**

undergraduate

**Other prerequisites**

--

**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**

--

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

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Module Catalogue for the Module studies (Bachelor)
Biology

<table>
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<tr>
<th>Module title</th>
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<tr>
<td>Computer languages and programming 3</td>
<td>07-SQF-PRO3-182-m01</td>
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**Module coordinator**

chairperson of examination committee Biologie (Biology)

**Module offered by**

Faculty of Biology

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<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

**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. The module will 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 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 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

--

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

--
Module title
Computer languages and programming 5

Abbreviation
07-SQF-PRO5-182-m01

Module coordinator
chairperson of examination committee Biologie (Biology)

Module offered by
Faculty of Biology

ECTS
5

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
-

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

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**Module title**  
Legal and Ethical Aspects in Biological Sciences

**Abbreviation**  
07-SQF-RETH-211-m01

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<td>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.</td>
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**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)

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<td>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</td>
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**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 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.

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

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Module title  | Abbreviation  
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Statistics 5  | 07-SQF-STAT5-182-m01

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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

(9) 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:

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

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<tr>
<td>Taxonomy and Biology of Butterflies</td>
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**Module coordinator**

degree programme coordinator Biologie (Biology)

**Module offered by**

Faculty of Biology

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<td>undergraduate</td>
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</table>

**Contents**


**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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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

--
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

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.

Intended learning outcomes

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.

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

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| **Intended learning outcomes** | |
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| **Allocation of places** | |
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| **Additional information** | |
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## Orientation/Review of organic Chemistry for students in Biology and MINT study programs

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<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents

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### Intended learning outcomes

--

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

<table>
<thead>
<tr>
<th>Ü (2)</th>
</tr>
</thead>
</table>

### 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

--

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

--
### Module Catalogue for the Module studies (Bachelor) Biology

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publishing Scientific Data</td>
<td>07-SQF-WIP-152-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioCareers</td>
<td>Faculty of Biology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>numerical grade</td>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either alone or in small groups of two or three persons, students will select several journal articles from the field</td>
</tr>
<tr>
<td>of life sciences. These will serve as the basis for a review article to be prepared by students. With two or three</td>
</tr>
<tr>
<td>&quot;core publications&quot; as a basis, students will search data bases (e.g. PubMed) for literature that is directly re-</td>
</tr>
<tr>
<td>lated to these articles. The most important current original publications will be summed up in a review article;</td>
</tr>
<tr>
<td>where applicable, students may also use their own raw data. The structure of this review article will comply with</td>
</tr>
<tr>
<td>the standards of the scientific community as defined in the instructions to authors of a scientific journal. The</td>
</tr>
<tr>
<td>article will contain at least one figure, one table as well as one schematic representation of the contents and will</td>
</tr>
<tr>
<td>be divided up into the following sections: title, abstract, introduction and/or hypothesis/problem to be investi-</td>
</tr>
<tr>
<td>gated, summary of results as well as current developments and discussion thereof. The article will also contain</td>
</tr>
<tr>
<td>citations in the specified format. Students will also deliver a presentation on the contents of the article.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will have learned to conduct a literature search on a specific topic. They will know how to get an over-</td>
</tr>
<tr>
<td>view of recent publications on a specific topic and will be familiar with basic rules for summing up original publi-</td>
</tr>
<tr>
<td>cations in a review article complying with the standards of the scientific community. Students will be familiar</td>
</tr>
<tr>
<td>with the standards regarding the structure of reviews and will be able to properly cite sources. They will thus</td>
</tr>
<tr>
<td>know what to keep in mind when writing scientific articles. In addition, students will be able to prepare and deli-</td>
</tr>
<tr>
<td>ver an oral presentation on raw scientific data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S (2) Module taught in: German and/or English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>term paper (approx. 5 to 10 pages) and presentation (approx. 15 minutes), weighted 2:1</td>
</tr>
<tr>
<td>Language of assessment: German and/or English</td>
</tr>
<tr>
<td>creditable for bonus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allocation of places</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 places. Should the number of applications exceed the number of available places, places will be allocated as</td>
</tr>
<tr>
<td>follows: Students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits will be given preferen-</td>
</tr>
<tr>
<td>tial consideration. Should the module be used in other subjects, there will be two quotas: 95% of places will be allo-</td>
</tr>
<tr>
<td>cated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a mini-</td>
</tr>
<tr>
<td>nimum of one place in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with</td>
</tr>
<tr>
<td>60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathematik (Mathema-</td>
</tr>
<tr>
<td>tik) (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as po-</td>
</tr>
<tr>
<td>tentially to students of other 'importing' subjects). Should the number of places available in one quota exceed</td>
</tr>
<tr>
<td>the number of applications, the remaining places will be allocated to applicants from the other quota. Should there</td>
</tr>
<tr>
<td>be, within one module component, several courses with a restricted number of places, there will be a uniform regula-</td>
</tr>
<tr>
<td>tion for the courses of one module component. In this case, places on all courses of a module component that are con-</td>
</tr>
<tr>
<td>cerned will be allocated in the same procedure. In this procedure, applicants who already have successfully completed</td>
</tr>
<tr>
<td>at least one other module component of the respective module will be given preferential consideration.</td>
</tr>
</tbody>
</table>
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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Referred to in LPO I (examination regulations for teaching-degree programmes)

---
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Effectively in English - MINT/STEM and Medical Faculties</td>
<td>07-ASQ-WEE-181-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean of Studies Biologie (Biology)</td>
<td>Faculty of Biology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Only after succ. compl. of module(s)</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S (2)</td>
</tr>
<tr>
<td>Module taught in: German and/or English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages)</td>
</tr>
<tr>
<td>Language of assessment: German and/or English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allocation of places</th>
</tr>
</thead>
<tbody>
<tr>
<td>max. 15 places (lottery)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Referred to in LPO I (examination regulations for teaching-degree programmes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
</tr>
</tbody>
</table>
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

--

Additional information

--

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

--
### Module Catalogue for the Module studies (Bachelor) Biology

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Qualification outside Natural Sciences 3</td>
<td>07-SQF-ZQA3-152-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioCareers</td>
<td>Faculty of Biology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Only after succ. compl. of module(s)</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

### 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

V (0.5) + S (1)

Module taught in: German and/or English

### Method of assessment

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

### Allocation of places

--

### Additional information

--

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

--
Module title
Additional Qualification outside Natural Sciences 4

Abbreviation
07-SQF-ZQA4-152-m01

Module coordinator
BioCareers

Module offered by
Faculty of Biology

ECTS
4

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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)

Module taught in: German and/or English

V (0.5) + S (1.5)

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

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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title
Additional Qualification outside Natural Sciences 5

Abbreviation
07-SQF-ZQA5-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
5

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
V (0.5) + S (2)
Module taught in: German and/or English

Method of assessment
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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title
Additional Qualification outside Natural Sciences 6
Abbreviation
07-SQF-ZQA6-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
5

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module title | Abbreviation
---|---
Additional Qualification in Natural Sciences 2 | 07-SQF-ZQN2-152-m01

Module coordinator | Module offered by
Coordinator BioCareers | Faculty of Biology

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>(not) successfully completed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**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**

V (0.5) + S (0.5) + Ü (0.5)
Module taught in: German and/or English

**Method of assessment**

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

**Allocation of places**

--

**Additional information**

--

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

--
### Module title

Additional Qualification in Natural Sciences 3

### Abbreviation

07-SQF-ZQN3-152-m01

### Module coordinator

Coordinator BioCareers

### Module offered by

Faculty of Biology

### ECTS

3

### Method of grading

Only after succ. compl. of module(s)

### (not) successfully completed

--

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

--

### 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

--

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

--
Module title
Additional Qualification in Natural Sciences 4

Abbreviation
07-SQF-ZQN4-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
Faculty of Biology

ECTS
4

Method of grading
Only after succ. compl. of module(s)

(not) successfully completed
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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
(V (0.5) + S (2) + Ü (2))
Module taught in: German and/or English

Method of assessment
(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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tr>
<td>Coordinator BioCareers</td>
<td>Faculty of Biology</td>
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<th>Other prerequisites</th>
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<th>Module level</th>
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<td>1 semester</td>
<td>undergraduate</td>
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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Winter Term 2021
(o ECTS credits)
<table>
<thead>
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<td>How to excel in the Bioscience</td>
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<td>1 semester</td>
<td>undergraduate</td>
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**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**

--

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

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## Module title
Methods and tools for Nature- and Environmental Education 1

### Abbreviation
07-LLG-M1-202-m01

### Module coordinator
head of group Didactics of Biology

### Module offered by
Botanical Garden

### ECTS
3

### Method of grading
Only after succ. compl. of module(s)

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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
<table>
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<tr>
<th>Type</th>
<th>Number of weekly contact hours</th>
<th>Language</th>
<th>If other than German</th>
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<tr>
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### Method of assessment
(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 reallocated as they become available.

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

--
Module title
Methods and tools for Nature- and Environmental Education 2

Abbreviation
07-LLG-M2-202-m01

Module coordinator
head of group Didactics of Biology

Module offered by
Botanical Garden

ECTS
3

Method of grading
Only after succ. compl. of module(s)

Method of grading
3 (not) successfully completed

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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 reallocated as they become available.

Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<tr>
<th>Duration</th>
<th>Module level</th>
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<tr>
<td>1 semester</td>
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**Contents**

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<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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<td>Ü (3)</td>
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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)

Portfolio (ca. 15 S.)

Assessment offered: Once a year, winter term

**Allocation of places**

min. 5, max. 20 places (Lottery)

**Additional information**

--

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

--
Organization and Safety in Biosciences  

Abbreviation: 07-SQF-OSB-152-m01

Module coordinator: Coordinator BioCareers

Module offered by: Faculty of Biology

ECTS: 5

Method of grading: Only after succ. compl. of module(s)

Numerical grade: --

Duration: 1 semester

Module level: undergraduate

Other prerequisites: --

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.
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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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<td>Practical Experience in transfer of knowledge obtained in the Teaching-Lear-</td>
<td>07-LLG-P1-202-m01</td>
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<tr>
<td>head of group Didactics of Biology</td>
<td>Botanical Garden</td>
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<th>Duration</th>
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<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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**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)

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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)

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

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<table>
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**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 reallocated as they become available.

**Additional information**

--

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

--
### Module title
Environmental Education in the Botanic Garden of Würzburg University

### Abbreviation
07-SQF-UBG-152-m01

### Module coordinator
head of Botanical Garden

### Module offered by
Faculty of Biology

### ECTS
2

### Method of grading
Only after succ. compl. of module(s)

### (not) successfully completed
--

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### Contents
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.

### Intended learning outcomes
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.

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

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Publishing Scientific Data

**Module title**
Publishing Scientific Data

**Abbreviation**
07-SQF-WIP-152-m01

**Module coordinator**
BioCareers

**Module offered by**
Faculty of Biology

**ECTS**
3

**Method of grading**
Only after succ. compl. of module(s)

**Numerical grade**
--

**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
--

**Contents**
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.

**Intended learning outcomes**
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.

**Courses**
(type, number of weekly contact hours, language — if other than German)
S (2)
Module taught in: German and/or English

**Method of assessment**
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**
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.
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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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### Module title
Writing Effectively in English - MINT/STEM and Medical Faculties

### Abbreviation
07-ASQ-WEE-181-m01

### Module coordinator
Dean of Studies Biologie (Biology)

### Module offered by
Faculty of Biology

### ECTS
5

### Method of grading
Only after succ. compl. of module(s)

### (not) successfully completed
--

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

## 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
--

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

--
### Module title
Additional Qualification outside Natural Sciences 2

### Abbreviation
07-SQF-ZQA2-152-m01

### Module coordinator
Coordinator BioCareers

### Module offered by
Faculty of Biology

### ECTS
2

### Method of grading
Only after succ. compl. of module(s)

### (not) successfully completed
--

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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
(V (0.5) + S (0.5))
Module taught in: German and/or English

### Method of assessment
(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
--

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

--
## Module title
Additional Qualification outside Natural Sciences 3

### Abbreviation
07-SQF-ZQA3-152-m01

## Module coordinator
Coordinator BioCareers

## Module offered by
Faculty of Biology

## ECTS
3

## Method of grading
Only after succ. compl. of module(s)

## (not) successfully completed
--

## Duration
1 semester

## Module level
undergraduate

## Other prerequisites
--

### 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
(V (0.5) + S (1)

**Module taught in:** German and/or English

### Method of assessment
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

### Allocation of places
--

### Additional information
--

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

--
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** | **Other prerequisites**
4 | (not) successfully completed | --

**Duration** | **Module level**
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**
--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)
--
### Module title
Additional Qualification outside Natural Sciences 5

### Abbreviation
07-SQF-ZQA5-152-m01

### Module coordinator
Coordinator BioCareers

### Module offered by
Faculty of Biology

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Only after succ. compl. of module(s)</td>
<td>--</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
</tr>
</tbody>
</table>

### 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
<table>
<thead>
<tr>
<th>Type</th>
<th>Number of weekly contact hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>0.5</td>
</tr>
<tr>
<td>S</td>
<td>2</td>
</tr>
</tbody>
</table>

Module taught in: German and/or English

### Method of assessment
- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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
--

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

--
### Additional Qualification outside Natural Sciences 6

**Module title**: Additional Qualification outside Natural Sciences 6

**Abbreviation**: 07-SQF-ZQA6-152-m01

**Module coordinator**: BioCareers

**Coordinator BioCareers**: Faculty of Biology

**ECTS**: 5

**Method of grading**: numerical grade

**Duration**: 1 semester

**Module level**: undergraduate

**Other prerequisites**: --

**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**

--

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

--
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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
### Additional Qualification in Natural Sciences 3

**Module title**
Additional Qualification in Natural Sciences 3

**Abbreviation**
07-SQF-ZQN3-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

**ECTS**
3

**Method of grading**
Only after succ. compl. of module(s)

**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
--

### 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

<table>
<thead>
<tr>
<th>Type</th>
<th>Contact Hours</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ü</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Module taught in: German and/or English

### Method of assessment

- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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

### Allocation of places
--

### Additional information
--

### Referred to in LPO I
(examination regulations for teaching-degree programmes)
--
Module title
Additional Qualification in Natural Sciences 4
Abbreviation
07-SQF-ZQN4-152-m01

Module coordinator
Coordinator BioCareers
Module offered by
Faculty of Biology

ECTS
4
Method of grading
Only after succ. compl. of module(s)

Duration
1 semester
Module level
undergraduate
Other prerequisites
--

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
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
Module Catalogue for the Module studies (Bachelor)

Module title | Abbreviation
--- | ---
Additional Qualification in Natural Sciences 5 | 07-SQF-ZQN5-152-m01

Module coordinator
Coordinator BioCareers

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 | 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
--

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

Additional Qualification in Natural Sciences 6

Abbreviation

07-SQF-ZQN6-152-m01

Module coordinator

Coordinator BioCareers

Module offered by

Faculty of Biology

ECTS

5

Method of grading

Only after succ. compl. of module(s)

numerical grade

Duration

1 semester

Module level

undergraduate

Other prerequisites

--

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

--

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

--
Summer Term 2022
(0 ECTS credits)
## Module title
How to excel in the Bioscience

## Abbreviation
07-ASQ-eBio-152-m01

### Module coordinator
Dean of Studies Biologie (Biology)

### Module offered by
Faculty of Biology

### ECTS
5

### Method of grading
Only after succ. compl. of module(s)

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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)

### Allocation of places
max. 20 places (lottery)

### Additional information
--

### Referred to in LPO I (examination regulations for teaching-degree programmes)
--
# Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)

**Module title**  
Basics and Trends in the Biotechnologies / Biosciences (not für students of Bioscientific curricula)

**Abbreviation**  
07-ASQ-GTB-182-m01

**Module coordinator**  
holder of the Chair of Biotechnology

**Module offered by**  
Faculty of Biology

**ECTS**  
3

**Method of grading**  
Only after succ. compl. of module(s)

**Duration**  
1 semester

**Module level**  
undergraduate

**Other prerequisites**  
--

## 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)

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of weekly contact hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Scope</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>presentation</td>
<td>(20 to 30 minutes)</td>
<td>German and/or English</td>
</tr>
</tbody>
</table>

**Allocation of places**  
min. 4, max. 20 places (lot)

**Additional information**  
--

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

--
Career Perspectives, Personal Competence and Communication Skills

Module title

Career Perspectives, Personal Competence and Communication Skills

Abbreviation

07-SQF-KEB-152-m01

Module coordinator

Co-BioCareers

Module offered by

Faculty of Biology

ECTS

5

Method of grading

Only after succ. compl. of module(s)

numerical grade

Duration

1 semester

Module level

Undergraduate

Other prerequisites

--

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

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### Module title

Methods and tools for Nature- and Environmental Education 1

### Abbreviation

07-LLG-M1-202-m01

### Module coordinator

head of group Didactics of Biology

### Module offered by

Botanical Garden

### ECTS

3

### Method of grading

Only after succ. compl. of module(s)

### (not) successfully completed

--

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

--

### 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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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Module title
Methods and tools for Nature- and Environmental Education 2

Abbreviation
07-LLG-M2-202-m01

Module coordinator
head of group Didactics of Biology

Module offered by
Botanical Garden

ECTS
3

Method of grading
Only after succe. compl. of module(s)

Module level
undergraduate

Duration
1 semester

Other prerequisites
--

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
(2)

Method of assessment
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 reallocated as they become available.

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

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<table>
<thead>
<tr>
<th>Module title</th>
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<tbody>
<tr>
<td>Experience nature outdoors</td>
<td>07-ASQ-NIF-201-m01</td>
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<table>
<thead>
<tr>
<th>Module coordinator</th>
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<td>--</td>
<td>Faculty of Biology</td>
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<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tr>
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<td>(not) successfully completed</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tr>
<td>1 semester</td>
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<table>
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<tr>
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<table>
<thead>
<tr>
<th>Intended learning outcomes</th>
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<table>
<thead>
<tr>
<th>Courses (type, number of weekly contact hours, language — if other than German)</th>
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<tbody>
<tr>
<td>Ü (3)</td>
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<table>
<thead>
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<th>Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
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<tbody>
<tr>
<td>Portfolio (ca. 15 S.) Assessment offered: Once a year, summer term</td>
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<table>
<thead>
<tr>
<th>Allocation of places</th>
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<tbody>
<tr>
<td>min. 5, max. 20 places (Lottery)</td>
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<table>
<thead>
<tr>
<th>Additional information</th>
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<table>
<thead>
<tr>
<th>Referred to in LPO I (examination regulations for teaching-degree programmes)</th>
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</tr>
<tr>
<td>Module title</td>
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<tr>
<td>----------------------------------</td>
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<tr>
<td>Fungi: One kingdom, many faces</td>
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<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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</thead>
<tbody>
<tr>
<td>holder of the Chair of Biotechnology and Biophysics</td>
<td>Faculty of Biology</td>
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<tr>
<td>5</td>
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<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

**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**

--

**Additional information**

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

--
### Module title

Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>07-LLG-P1-202-m01</th>
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### Module coordinator

head of group Didactics of Biology

### Module offered by

Botanical Garden

### ECTS

3

### Method of grading

(only after successfully completed module(s))

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

--

### 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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
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<td>Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 2</td>
<td>07-LLG-P2-202-m01</td>
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<tbody>
<tr>
<td>head of group Didactics of Biology</td>
<td>Botanical Garden</td>
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<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<td>3</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
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<td>1 semester</td>
<td>undergraduate</td>
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**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 reallocated as they become available.

**Additional information**

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

--
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 | Other prerequisites |
--- | --- | ---
3 | (not) successfully completed | -- |

| Duration | Module level |
--- | ---
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

 agli

| Courses (type, number of weekly contact hours, language — if other than German) |
--- |
Ü (1) |
Module taught in: German and/or English |

Method of assessment

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

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

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Module title

Computer languages and programming 5

Abbreviation

07-SQF-PRO5-182-m01

Module coordinator

chairperson of examination committee Biologie (Biology)

Module offered by

Faculty of Biology

ECTS

5

Method of grading

Only after succ. compl. of module(s)

Duration

1 semester

Module level

undergraduate

Other prerequisites

--

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 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**

**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
--

Additional information
--

Referred to in LPO I (examination regulations for teaching-degree programmes)
--
### Module title
Statistics 3

### Abbreviation
07-SQF-STAT3-182-m01

### Module coordinator
degree programme coordinator Biologie (Biology)

### Module offered by
Faculty of Biology

### ECTS
3

### Method of grading
(only after succ. compl. of module(s))

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### 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
(ü (1)

*Module taught in: German and/or English

### Method of assessment
(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 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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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module title
Statistics 5

Abbreviation
07-SQF-STAT5-182-m01

Module coordinator
degree programme coordinator Biologie (Biology)

Module offered by
Faculty of Biology

ECTS
5

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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 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

---

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

---
Module title
Taxonomy and Biology of Butterflies

Abbreviation
07-SQF-BUFLY-182-m01

Module coordinator
degree programme coordinator Biologie (Biology)

Module offered by
Faculty of Biology

ECTS
5

Method of grading
numeral grade

Only after succ. compl. of module(s)
--

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

Contents

Intended learning outcomes
Students are able to recognize butterfly families and species and are able to estimate the relevance of butterflies as bioindicators.

Courses
(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
--

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

--
Module title
Environmental Education in the Botanic Garden of Würzburg University

Abbreviation
07-SQF-UBG-152-m01

Module coordinator
head of Botanical Garden

Module offered by
Faculty of Biology

ECTS
Method of grading
2 (not) successfully completed

Duration
Module level
1 semester
undergraduate

Other prerequisites
--

Contents
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.

Intended learning outcomes
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.

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Orientation/Review of inorganic Chemistry for students in Biology and MINT study programs</td>
<td>07-ASQ-VAC-201-m01</td>
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<th>Method of grading</th>
<th>Other prerequisites</th>
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<tr>
<td>Orientation/Review of Statistics for students in Biology and MINT studyprograms</td>
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<tr>
<td>portfolio (approx. 20 hours total)</td>
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<td>max. 20 places (Lottery)</td>
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| **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) Assessments offered: Once a year, summer term |

| **Allocation of places** | max. 20 places (Lottery) |
| **Additional information** | -- |

| **Referred to in LPO I** (examination regulations for teaching-degree programmes) | -- |
### Module title
Publishing Scientific Data

### Abbreviation
07-SQF-WIP-152-m01

### Module coordinator
BioCareers

### Module offered by
Faculty of Biology

### ECTS
3

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
--

### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
--

### Contents
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.

### Intended learning outcomes
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.

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

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<table>
<thead>
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<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Writing Effectively in English - MINT/STEM and Medical Faculties</td>
<td>07-ASQ-WEE-181-m01</td>
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<tr>
<td>Dean of Studies Biologie (Biology)</td>
<td>Faculty of Biology</td>
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<tr>
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<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

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

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## Module Catalogue for the Module studies (Bachelor)

### Biology

<table>
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<tbody>
<tr>
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<tr>
<td>Coordinator BioCareers</td>
<td>Faculty of Biology</td>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</table>

### 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

<table>
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<tr>
<th>Type</th>
<th>Number of weekly contact hours</th>
<th>Language</th>
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<tr>
<td>S</td>
<td>0.5</td>
<td>German and/or English</td>
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</table>

Module taught in: German and/or English

### Method of assessment

- 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

### Allocation of places

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### Additional information

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

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## Module title

Additional Qualification outside Natural Sciences 3

| Abbreviation | 07-SQF-ZQA3-152-m01 |

## Module coordinator

Coordinator BioCareers

## Module offered by

Faculty of Biology

## ECTS

3

## Method of grading

Only after succ. compl. of module(s)

## Duration

1 semester

## Module level

undergraduate

## Other prerequisites

- 

## 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

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<td>English</td>
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</table>

Module taught in: German and/or English

## Method of assessment

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

## Allocation of places

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## Additional information

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## Referred to in LPO I

(examination regulations for teaching-degree programmes)
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<td>Faculty of Biology</td>
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<tbody>
<tr>
<td>1 semester</td>
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**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**

V (0.5) + S (1.5)

Module taught in: German and/or English

**Method of assessment**

(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**

--

**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

--
**Module title**
Additional Qualification outside Natural Sciences 5

**Abbreviation**
07-SQF-ZQA5-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

**ECTS**
5

**Method of grading**
Only after succ. compl. of module(s)

**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
--

**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**
(V 0.5) + S (2)
Module taught in: German and/or English

**Method of assessment**
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

**Allocation of places**
--

**Additional information**
--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)
--
**Module title**
Additional Qualification outside Natural Sciences 6

**Abbreviation**
07-SQF-ZQA6-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)
--
Module title | Abbreviation
---|---
Additional Qualification in Natural Sciences 2 | 07-SQF-ZQN2-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

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**Duration**
1 semester

**Module level**
undergraduate

**Other prerequisites**
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**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

**Allocation of places**
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**Additional information**
--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)
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Module title | Abbreviation
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Additional Qualification in Natural Sciences 3 | 07-SQF-ZQN3-152-m01

Module coordinator | Module offered by
Coordinator BioCareers | Faculty of Biology

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

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**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**

--

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

--
### Module title

Additional Qualification in Natural Sciences 5

### Abbreviation

07-SQF-ZQN5-152-m01

### Module coordinator

Coordinator BioCareers

### Module offered by

Faculty of Biology

### ECTS

5

### Method of grading

Only after succ. compl. of module(s)

### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

--

### 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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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**Module coordinator**

Coordinator BioCareers

**Module offered by**

Faculty of Biology

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**Contents**

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**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**

--

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

--
Winter Term 2022
(0 ECTS credits)
### Module title

**How to excel in the Bioscience**

| Abbreviation | 07-ASQ-eBio-152-m01 |

### Module coordinator

Dean of Studies Biologie (Biology)

### Module offered by

Faculty of Biology

### ECTS

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### Contents

A 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

<table>
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### Method of assessment

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<tr>
<td>a) presentation (approx. 30 minutes) or b) portfolio (approx. 20 pages) Language of assessment: German and/or English</td>
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### Allocation of places

max. 20 places (lottery)

### Additional information

--

### Referred to in LPO I

(examination regulations for teaching-degree programmes)

--
Module title
Methods and tools for Nature- and Environmental Education 1

Abbreviation
07-LLG-M1-202-m01

Module coordinator
head of group Didactics of Biology

Module offered by
Botanical Garden

ECTS
3

Method of grading
Only after succ. compl. of module(s)

Duration
1 semester

Module level
undergraduate

Other prerequisites
--

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

Portfolio (ca. 15 S.)
Assessment offered: Once a year, winter term

**Allocation of places**

min. 5, max. 20 places (Lottery)

**Additional information**

--

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

--
Module title

Organisation and Safety in Biosciences

Abbreviation

07-SQF-OSB-152-m01

Module coordinator

Coordinator BioCareers

Module offered by

Faculty of Biology

ECTS

5

Method of grading

Only after succ. compl. of module(s)

numerical grade

Duration

1 semester

Module level

undergraduate

Other prerequisites

--

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.
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

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

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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Practical Experience in transfer of knowledge obtained in the Teaching-Learning-Garden 1</td>
<td>07-LLG-P1-202-m01</td>
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**Module coordinator**  
head of group Didactics of Biology  
Botanical Garden

**ECTS**  
3  

**Method of grading**  
Only after succ. compl. of module(s)

**Duration**  
1 semester  
Module level  
undergraduate  
Other prerequisites  
--

**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)
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<table>
<thead>
<tr>
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<th>Abbreviation</th>
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<tbody>
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<td>head of group Didactics of Biology</td>
<td>Botanical Garden</td>
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<tr>
<th>ECTS</th>
<th>Method of grading</th>
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<tr>
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<th>Module level</th>
<th>Other prerequisites</th>
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<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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### 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

<table>
<thead>
<tr>
<th>(type, number of weekly contact hours, language — if other than German)</th>
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<tbody>
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<td>Ü (2)</td>
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### Method of assessment

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<th>(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
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</thead>
<tbody>
<tr>
<td>a) presentation (20 to 30 minutes) or b) term paper (7 to 10 pages)</td>
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</table>

### 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 reallocated as they become available.

### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

--
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

<table>
<thead>
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<th>ECTS</th>
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<table>
<thead>
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<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
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</tbody>
</table>

Contents
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.

Intended learning outcomes
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.

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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
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<td>Publishing Scientific Data</td>
<td>07-SQF-WIP-152-m01</td>
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<th>Module coordinator</th>
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<tr>
<td>BioCareers</td>
<td>Faculty of Biology</td>
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<table>
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<th>Duration</th>
<th>Module level</th>
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<tbody>
<tr>
<td>3</td>
<td>numerical grade</td>
<td>1 semester</td>
<td>undergraduate</td>
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</tbody>
</table>

**Contents**

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.

**Intended learning outcomes**

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.

**Courses**

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<th>Type, number of weekly contact hours, language — if other than German</th>
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<td>S (2)</td>
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</table>
Module taught in: German and/or English

**Method of assessment**

<table>
<thead>
<tr>
<th>Type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus</th>
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</thead>
<tbody>
<tr>
<td>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</td>
</tr>
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</table>

**Allocation of places**

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

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Module title: Writing Effectively in English - MINT/STEM and Medical Faculties
Abbreviation: 07-ASQ-WEE-181-m01

Module coordinator: Dean of Studies Biologie (Biology)
Module offered by: Faculty of Biology

ECTS: 5
Method of grading: Only after succ. compl. of module(s)
(Not) successfully completed: --

Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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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Referred to in LPO I (examination regulations for teaching-degree programmes):
--
Module title | Abbreviation
---|---
Additional Qualification outside Natural Sciences 2 | 07-SQF-ZQA2-152-m01

Module coordinator
Coordinator BioCareers

Module offered by
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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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<table>
<thead>
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<td>BioCareers</td>
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<th>Duration</th>
<th>Module level</th>
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</thead>
<tbody>
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<td>1 semester</td>
<td>undergraduate</td>
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**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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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Module title: Additional Qualification outside Natural Sciences 4
Abbreviation: 07-SQF-ZQA4-152-m01

Module coordinator: BioCareers
Module offered by: Faculty of Biology
ECTS: 4
Method of grading: Only after successfully completed module(s)
Duration: 1 semester
Module level: undergraduate
Other prerequisites: --

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: --

Referred to in LPO I (examination regulations for teaching-degree programmes): --
### Module title

**Additional Qualification outside Natural Sciences 5**

### Abbreviation

07-SQF-ZQA5-152-m01

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<td>Faculty of Biology</td>
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<th>Method of grading</th>
<th>Other prerequisites</th>
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<th>Duration</th>
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<tbody>
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### 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

V (0.5) + S (2)

Module taught in: German and/or English

### Method of assessment

<table>
<thead>
<tr>
<th>Type</th>
<th>Scope</th>
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<tr>
<td>a) written examination (approx. 45 to 60 minutes)</td>
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<tr>
<td>b) log (approx. 10 to 20 pages)</td>
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<tr>
<td>c) oral examination of one candidate each (approx. 30 minutes)</td>
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<tr>
<td>d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)</td>
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<td>e) presentation (approx. 20 to 30 minutes)</td>
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<tr>
<td>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)</td>
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Students will be informed about the method and length of the assessment prior to the course.

Language of assessment: German and/or English

### Allocation of places

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### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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<table>
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**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

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<th>ECTS</th>
<th>Method of grading</th>
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<td>numerical grade</td>
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**Duration**
1 semester

**Module level**
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**

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<th>Type</th>
<th>Number of weekly contact hours</th>
<th>Language</th>
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<td>S</td>
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</table>

**Module taught in:**
- German and/or English

**Method of assessment**

- a) written examination (approx. 45 to 60 minutes)
- b) log (approx. 10 to 20 pages)
- c) oral examination of one candidate each (approx. 30 minutes)
- d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate)
- e) presentation (approx. 20 to 30 minutes)
- 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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**Referred to in LPO I**
(examination regulations for teaching-degree programmes)
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**Module title**
Additional Qualification in Natural Sciences 2

**Abbreviation**
07-SQF-ZQN2-152-m01

**Module coordinator**
Coordinator BioCareers

**Module offered by**
Faculty of Biology

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<th>ECTS</th>
<th>Method of grading</th>
<th>Other prerequisites</th>
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<td>2</td>
<td>Only after succ. compl. of module(s)</td>
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<tr>
<th>Duration</th>
<th>Module level</th>
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<tr>
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<td>undergraduate</td>
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**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**
(V (0.5) + S (0.5) + Ü (0.5))
Module taught in: German and/or English

**Method of assessment**
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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**Referred to in LPO I** (examination regulations for teaching-degree programmes)
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**Module title**  
Additional Qualification in Natural Sciences 3

**Abbreviation**  
07-SQF-ZQN3-152-m01

**Module coordinator**  
Coordinator BioCareers

**Module offered by**  
Faculty of Biology

**ECTS**  
3

**Method of grading**  
Only after succ. compl. of module(s)

**Duration**  
1 semester

**Module level**  
undergraduate

**Other prerequisites**  
--

**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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**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
Coordinators 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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Referred to in LPO I (examination regulations for teaching-degree programmes)
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### Module title

**Additional Qualification in Natural Sciences 5**

### Abbreviation

07-SQF-ZQN5-152-m01

### Module coordinator

Coordinator BioCareers

### Module offered by

Faculty of Biology

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</table>

### Other prerequisites

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### 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

(V (1) + S (1) + Ü (1))

Module taught in: German and/or English

### Method of assessment

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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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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Module title | Additional Qualification in Natural Sciences 6
---|---
Abbreviation | 07-SQF-ZQN6-152-m01

Module coordinator | Coordinator BioCareers

Module offered by | Faculty of Biology

ECTS | 5
Method of grading | numerical grade
Only after succ. compl. of module(s) | --

Duration | 1 semester
Module level | undergraduate
Other prerequisites | --

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

Allocation of places
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Additional information
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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