## Module title

Basic Principles for Laboratory Work

### Abbreviation

07-SQF-GGL-102-m01

### Module coordinator

Coordinator BioCareers

### Module offered by

Faculty of Biology

### ECTS

3

### Method of grading

Numerical grade

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

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### Duration

1 semester

### Module level

Undergraduate

### Other prerequisites

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## Contents

This module will teach students basic rules regarding everyday lab procedures, e.g. designing experiments, the sensible use of checks, keeping lab notebooks, handling of reagents, storage and disposal, maintenance of lab equipment, handling of radioactivity; background knowledge on electrophoresis, centrifugation and light microscopy. In addition, the course will discuss fundamental cell culture techniques (eukaryotic and bacterial) as well as fundamental techniques for the molecular biological analysis of DNA, RNA and proteins.

## Intended learning outcomes

Students are able to effectively structure research projects - from experiment design through to the publication of findings -, to design relevant follow-up experiments if initial experiments suggest certain findings, and to progress from hypotheses to ready-to-publish results.

## Courses

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<th>Type</th>
<th>Number of weekly contact hours</th>
<th>Language — if other than German</th>
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<tr>
<td>V + Ü</td>
<td>(no information on SWS (weekly contact hours) and course language available)</td>
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## Method of assessment

Written examination or practical examination (approx. 20 minutes)

## Allocation of places

Number of places: 50. Should the number of applications exceed the number of available places, places will be allocated as follows: Places will primarily be allocated to students of the Bachelor’s degree subject Biologie (Biology) with 180 ECTS credits. 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 participant 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 a standardised 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, pla-
ces 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): allocation by lot. 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 appears in

- Bachelor’ degree (1 major) Biology (2011)
- Bachelor’ degree (1 major) Biology (2013)
- Bachelor’ degree (1 major) Biology (2010)