**Basic Principles and Good Practices in laboratory, clinical and industry**

**07-SQA-GXP-072-m01**

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
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<tbody>
<tr>
<td>holder of the Chair of Bioinformatics</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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<tbody>
<tr>
<td>4</td>
<td>numerical grade</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>
<td>undergraduate</td>
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**Contents**

Module component 1 will acquaint students with the legal provisions and ethical guidelines for work in both the laboratory and clinical context, including clinical research, as well as in pharmaceutical, chemical and biotechnological production. The course will discuss the guidelines for safeguarding good scientific practice that are in place at American, European and German authorities, universities and organisations that are active in the abovementioned areas. Module component 2 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 have acquired an overview of general and specific rules and regulations governing scientific research, work in research labs, clinical trials as well as pharmaceutical and biotechnological production. They are familiar with the competent national and international regulatory bodies and standardisation authorities and, where necessary, are able to come up with answers to specific problems, referring to the relevant regulations. Students are able to adhere to existing guidelines, both during lab courses at university and in their future workplace. They 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**

This module comprises 2 module components. Information on courses will be listed separately for each module component.

- 07-SQA-GXP-1-072: V (no information on SWS (weekly contact hours) and course language available)
- 07-SQA-GXP-2-072: V + Ü (no information on SWS (weekly contact hours) and course language available)

**Method of assessment**

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

**Assessment in module component 07-SQA-GXP-1-072: Good Practices in Laboratory, Clinics and Production**

- 2 ECTS, Method of grading: numerical grade
- written examination (approx. 20 minutes)
- Assessment offered: once a year, winter semester

**Assessment in module component 07-SQA-GXP-2-072: Basic Principles for Laboratory Work**

- 2 ECTS, Method of grading: numerical grade
- written examination (approx. 20 minutes)
- Assessment offered: once a year, winter semester

**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 appears in**

keinem Studiengang zugeordnet