

Module title		Abbreviation
Basic Microbiology		07-GY-MIBl1-092-m01
Module coordinator		Module offered by
Dean of Studies Biologie (Biology)		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
4	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	By way of exception, additional prerequisites are listed in the section on assessments.
Contents		
This module will discuss the prokaryotic ultrastructure with its components and their functions as well as physiological performances of this group of organisms. Peculiarities of prokaryotes and factors that differentiate prokaryotes from eukaryotes will also be addressed. During practical exercises, students will become familiar both with important examples of bacteria and with morphological criteria for the classification of bacteria as well as the quantification of the same. Other experiments on physiology will also be performed during the course.		
Intended learning outcomes		
Knowledge of the structure of prokaryotic cells. Knowledge of the differences between prokaryotic and eukaryotic cells. Knowledge of the specific characteristics of the intracellular structure of prokaryotes. Familiarity with important representatives of the prokaryotic community. Ability to classify prokaryotes based on features visible under the microscope. Knowledge related to the growth of bacterial colonies. Basic familiarity with the biochemistry of bacterial metabolic pathways. Ability to use essential methods in biochemistry in the lab.		
Courses (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> • 07-LA-MIBl1-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available) • 07-GY-MIBl1-2-092: V + Ü (no information on SWS (weekly contact hours) and course language available) 		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
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-LA-MIBl1-1-092: Introduction to Microbiology (Lecture, Practice) Introduction to Microbiology (Lecture, Practice) <ul style="list-style-type: none"> • 1 ECTS, Method of grading: (not) successfully completed • logs (10 to 15 pages) • Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises, seminars and lab courses (weekly courses: a maximum of one incident of unexcused absence and one excused absence for a legitimate reason; fortnightly courses: one incident of unexcused absence) and successful completion of the respective exercises (required percentage as specified at the beginning of the course). The preparation of logs (10 to 15 pages) is an admission prerequisite to assessment. 		
Assessment in module component 07-GY-MIBl1-2-092: Basic Physiology of Prokaryotes (Lecture, Practice) Basic Physiology of Prokaryotes (Lecture, Practice) <ul style="list-style-type: none"> • 3 ECTS, Method of grading: numerical grade • written examination (30 to 60 minutes) • Other prerequisites: Admission prerequisite to assessment: regular attendance of exercises, seminars and lab courses (weekly courses: a maximum of one incident of unexcused absence and one excused absence for a legitimate reason; fortnightly courses: one incident of unexcused absence) and successful completion of the respective exercises (required percentage as specified at the beginning of the course). The preparation of logs (10 to 15 pages) is an admission prerequisite to assessment. 		

Allocation of places

--

Additional information

--

Workload

--

Teaching cycle

--

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

§ 41 (1) 3. "Genetik oder Mikrobiologie"

§ 61 (1) 3. Biologie "Genetik und Mikrobiologie"

Module appears in

First state examination for the teaching degree Gymnasium Biology (2009)