Module title			Abbreviation
Structure and Function of Cells			07-LA-BIO1-ZE-262-m01
Module coordinator		**Module offered by**	
holder of the Chair of Botany I		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	Admission prerequisite to assessment: exercises; Admission to the examination (NUM) is not automatic upon registration. The prerequisite for admission to the examination is regular attendance at the exercises (at least 80% attendance) and passing the exercises set there, which amount to approximately 25-30 hours (B/NB).	

Contents

The first part of this lecture series will provide you with an overview of the physical and chemical bases of life. We will then explore the internal organisation and the morphology of the cell, the fundamental unit of life. In this context, we will discuss the "general" functional elements of the cell, comparing prokaryotic, animal and plant cells. After having discussed cell evolution, we will set out on a journey through the cell, exploring the extracellular matrix/cell wall, cytoskeleton, organelles and nucleus. To help you understand how a cell functions, we will discuss the functions of these components. During exercises, practical examples will provide you with an opportunity to explore the material in more detail: we will work with microscopic preparations, complete exercises and use multimedia aids. You will learn and practise preparation and light microscopy techniques that you will apply in the exercise of the module *Das Pflanzen- und Tierreich* (*The Plant and Animal Kingdoms*). In addition, we will discuss aspects related to everyday procedures in biological laboratories.

Intended learning outcomes

Students will be able to recognise, describe and evaluate interactions between plants and their environment. They will be able to perform basic experiments to analyse these interactions.

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

V (2) + Ü (3)

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

written examination (approx. 60 minutes)
creditable for bonus

Allocation of places

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Additional information

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Workload

120 h

Teaching cycle

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

§ 41 I Nr. 1 (3 ECTS credits), § 41 I Nr. 3 (1 ECTS credit) (The major part of exercises in the field of Biology at the University of Würzburg is of practical typ and correspond to to the lab courses given in LPO I.)
§ 61 I Nr. 1 (3 ECTS credits), § 61 I Nr. 3 (1 ECTS credits) (The major part of exercises in the field of Biology at the University of Würzburg is of practical typ and correspond to to the lab courses given in LPO I.)

Module appears in

keinem Studiengang zugeordnet

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