

Module title		Abbreviation
General Biology of Economic Plants from Food and Forage		07-LMC-BIO1-152-m01
Module coordinator		Module offered by
holder of the Chair of Plant Physiology and Biophysics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
7	numerical grade	--
Duration	Module level	Other prerequisites
2 semester	undergraduate	--
Contents		
<p>The first part of the winter semester course will discuss the plant cell, the smallest unit of the plant organism, starting with its macroscopic structure before moving on to its microscopic structure. The course will point out differences and similarities between prokaryotic cells (bacteria, archaebacteria) and eukaryotic cells (animals, plants). In the second part of the winter semester course, students will acquire the fundamental knowledge necessary to understand the form (anatomy, morphology and cytology) and function of plant organisms. The summer semester course will introduce students to the fundamental principles of botany, using the example of food and fodder crops. Taking into account their taxonomy, morphology and cytology, the course will discuss the photosynthesis as well as other physiological and genetic aspects of selected crops and their compounds as well as aspects related to the breeding of these crops. In this context, the course will point out differences that may be used, for example, for the microscopic identification of a variety of food and fodder crops.</p>		
Intended learning outcomes		
<p>In the winter semester, students have acquired a knowledge of the structure of plant cells and their (biological) macromolecules as well as of the specific characteristics of the intracellular and extracellular structures of plant cells. In the summer semester, students have acquired the following knowledge and skills:</p> <ul style="list-style-type: none"> • Fundamental knowledge of the distinguishing characteristics, genetics, photosynthesis and physiology of representatives of the plant kingdom with special attention to crops. • Fundamental knowledge of major anatomical and morphological plant traits as well as of the compounds of food and fodder crops. • Fundamental knowledge of the components and functioning of microscopes. • Fundamental preparation skills. • Basic familiarity with methods for the microscopic examination of crops. • Fundamental skills in the interpretation of macroscopic and histological plant preparations by light microscopy. 		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + V (1) + P (4)		
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 (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)		
Allocation of places		
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Additional information		
Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. 1 2. Letter e) of Annex 1 of APOLmCh and No. 5 of Annex 2 of APOLmCh.		
Workload		
210 h		



Teaching cycle

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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) Food Chemistry (2015)

Bachelor' degree (1 major) Food Chemistry (2016)

Bachelor' degree (1 major) Food Chemistry (2019)

Bachelor' degree (1 major) Food Chemistry (2021)