

Module title		Abbreviation
Genetics and Behaviour		07-GMR-GV-152-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)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Students will become familiar with classic Mendelian genetics as well as modern findings on the transmission of genetic information, potential errors in the transmission of genetic information and the respective consequences for the phenotype. The module will discuss the structural and molecular fundamentals of the DNA as well as the structure of the eukaryotic genome. Building on this knowledge, the module will provide students with an overview of methods in genetics. Having been simplified for teaching purposes, these methods will then be applied in experiments on the model organism <i>Drosophila melanogaster</i>.</p>		
Intended learning outcomes		
<p>Students are able to recognise the DNA as a repository of information that is a key factor determining the phenotype of an organisms. They understand that regulation is necessary during genome expression and recognise the principles behind the respective mechanisms. In addition, students are able to discuss methods in genetics as well as the relevance these have to medicine. They are able to differentiate between ultimate and proximate causes of behaviour as well as to explain classical experiments in behavioural biology and the biology of learning. Students are also able to describe the fundamental principles of sociobiology and to evaluate the need for communication in the animal kingdom.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (1) + Ü (3.5)		
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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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 41 I Nr. 3 (3 ECTS credits) § 41 I Nr. 4 (2 ECTS credits)		
Module appears in		
<p>First state examination for the teaching degree Grundschule Biology (2015) First state examination for the teaching degree Realschule Biology (2015) First state examination for the teaching degree Mittelschule Biology (2015) First state examination for the teaching degree Mittelschule Biology (2020 (Prüfungsordnungsversion 2015))</p>		