Module title | Abbreviation
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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)
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5 | numerical grade | --

Duration | Module level | Other prerequisites
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1 semester | undergraduate | --

Contents
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 Drosophila melanogaster.

Intended learning outcomes
Students are able to recognise the DNA as a repository of information that is a key factor determining the phenotype of an organism. 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.

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
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)