

Module title		Abbreviation
Endogenous Clocks		07-MS1CB-152-m01
Module coordinator		Module offered by
holder of the Chair of Neurobiology and Genetics		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
Introduction into endogenous clocks of unicellular organisms, fungi, plants and animals, with a focus on the neuronal organisation of the clock in the brain of mammals and insects. The biological functions of endogenous clocks and the underlying mechanisms will be discussed on the molecular, cellular and organismic levels. It will be explained how clocks adjust to a 24h day with variable photoperiods. Applied aspects regarding e. g. shift work or jetlag will also be discussed.		
Intended learning outcomes		
The students learn fundamental principles underlying chronobiology/endogenous clocks and obtain an insight into current research in the field. In the seminar, they practise their presentation skills and the discussion of research findings in English.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (2) + S (1) Module taught in: English		
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 (30 to 60 minutes, including multiple choice questions) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (30 to 60 minutes) Students will be informed about the method, length and scope of the assessment prior to the course. Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
300 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		
Master's degree (1 major) Biology (2015) Master's degree (1 major) FOKUS Life Sciences (2015) Master's degree (1 major) Biosciences (2016) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Master's degree (1 major) Biosciences (2017) Master's degree (1 major) Biosciences (2018) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)		

Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)
Master's degree (1 major) Biosciences (2021)
exchange program Biosciences (2022)
Master's degree (1 major) Biosciences (2023)
Master's degree (1 major) Biosciences (2024)