Module title: Structural Biology 1  
Abbreviation: 03-5S2ST-092-m01

Module coordinator: holder of the Chair of Structural Biology  
Module offered by: Faculty of Medicine

ECTS: 10  
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester  
Module level: undergraduate

Contents:
This module provides a brief introduction to crystallography and commonly used biophysical techniques as well as the fundamental principles of macromolecular architectures. Building on this, the structure and function of selected biological macromolecules are presented. In small groups, participants will analyse one specific macromolecule in silico with respect to its structure and biological function and will present their results in a talk. The various macromolecules in their entirety reflect a number of important biological problems.

Intended learning outcomes:
On the basis of individually assigned model proteins, the students will acquire the ability to explore common problems in structural biology and to analyse structure-function relationships. They will also acquire skills in the oral presentation of scientific results as well as in the in silico analysis of biological macromolecules.

Courses:
V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment:
(a) written examination (approx. 60 minutes) or (b) log (approx. 10 to 20 pages) or (c) oral examination of one candidate each (approx. 30 minutes) or (d) oral examination in groups (groups of up to 3 candidates, approx. 60 minutes) or (e) presentation (approx. 20 to 30 minutes)

Allocation of places:
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Additional information:
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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) Biochemistry (2009)  
Bachelor' degree (1 major) Biology (2007)