### Module title

**Systems Biology**

### Abbreviation

07-MS3S-152-m01

### Module coordinator

holder of the Chair of Bioinformatics

### Module offered by

Faculty of Biology

### ECTS

10

### Method of grading

numerical grade

### Only after succ. compl. of module(s)

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### Duration

1 semester

### Module level

graduate

### Other prerequisites

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### Contents

Advances and current results of computational systems biology are explained and discussed, this includes results from functional genomics, dynamics of the transcriptome, of metabolism and metabolic networks as well as regulatory networks.

### Intended learning outcomes

Understand recent results in systems biology. Discuss their implications. Have an advanced (Master) level knowledge of typical technologies and research questions of systems biology.

### Courses

(type, number of weekly contact hours, language — if other than German)

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<thead>
<tr>
<th>Type</th>
<th>Weekly Contact Hours</th>
<th>Language</th>
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<td>V</td>
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<td>German and/or English</td>
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Module taught in: German and/or 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)

Students will be informed about the method, length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (30 to 60 minutes)

Language of assessment: German and/or English

### 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

- Master's degree (1 major) Biochemistry (2015)
- Master's degree (1 major) Biology (2015)
- Master's degree (1 major) Mathematics (2016)
- Master's degree (1 major) Computational Mathematics (2016)
- 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) Biochemistry (2017)
- Master's degree (1 major) Biosciences (2018)
- Master's degree (1 major) Computational Mathematics (2019)
- Master's degree (1 major) Mathematics (2019)
- Master's degree (1 major) Biochemistry (2019)