bio695 - Biochemical concepts in signal transduction

**Module label**: Biochemical concepts in signal transduction
**Module code**: bio695
**Credit points**: 12.0 KP
**Workload**: 360 h

**Used in course of study**
- Master's Programme Biology > Background Modules
- Master's Programme Biology > Background Modules
- Master's Programme Neuroscience > Background Modules

**Contact person**
**Module responsibility**
- Karl-Wilhelm Koch

**Authorized examiners**
- Karl-Wilhelm Koch
- Alexander Scholten

**Module counseling**
- Alexander Scholten

**Entry requirements**
**Skills to be acquired in this module**
++ deepened biological expertise
++ deepened knowledge of biological working methods
++ data analysis skills
+ interdisciplinary thinking
++ critical and analytical thinking
+ independent searching and knowledge of scientific literature
++ data presentation and discussion in German and English (written and spoken)
+ teamwork
+ project and time management

**Module contents**
- Lecture: Molecular fundamentals of cellular signal processes
- Seminar: Signal transduction
- Exercises: Experiments on cellular signal transduction and enzymology

**Mechanisms of biochemical signal transduction are imparted theoretically and experimentally**

**Reader's advisory**
Textbooks of cell biology and biochemistry. Current literature on topics of signal transduction (as announced in the preparatory meeting).

**Links**
**Language of instruction**: English
**Duration (semesters)**: 1 Semester
**Module frequency**: ---
**Module capacity**: 20
**Modulart**: je nach Studiengang Pflicht oder Wahlpflicht
**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
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<tbody>
<tr>
<td>Final exam of module</td>
<td>90 minutes written exam</td>
<td>written examination (50%) protocells (50%)</td>
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<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
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<tbody>
<tr>
<td>Lecture</td>
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<td>14 h</td>
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<tr>
<td>Seminar</td>
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<td>Exercises</td>
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<td>WiSe</td>
<td>84 h</td>
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**Total time of attendance for the module**: 112 h