### 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 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

**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**

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**Module capacity**

20

**Moduleart**

je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

- Final exam of module: 90 minutes written exam  
- Written examination (50%)  
- Protocolls (50%)

**Course type**

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>1.00</td>
<td>WiSe</td>
<td>14 h</td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td>1.00</td>
<td>WiSe</td>
<td>14 h</td>
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<tr>
<td>Exercises</td>
<td>6.00</td>
<td>WiSe</td>
<td>84 h</td>
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**Total time of attendance for the module**

112 h