neu270 - Neurocognition & Psychophysics

Module label: Neurocognition & Psychophysics  
Module code: neu270  
Credit points: 15.0 KP  
Workload: 450 h  
Used in course of study: Master's Programme Neuroscience > Background Modules

Contact person:  
Module responsibility:  
Georg Martin Klump  
Authorized examiners:  
Alle hier genannten  
Module counseling:  
Christiane Margarete Thiel  
Ulrike Langemann  
Carsten Gießing

Entry requirements:  
Skills to be acquired in this module:  
Neurosci. knowlg. Expt. methods + Independent research + Scient. literature + Social skills  
Interdiscipl. knowlg. Maths/Stats/Progr. + Data present./disc. + Scientific English Ethics  
The aim of the module is the study of different aspects of psychophysics or neurocognition. Students participate in ongoing projects and gain a first insight into topical research.

Module contents:  
Students have the choice of two basic streams:  
Stream 1: "Neurocognition" comprises (i) an exercise "Introduction to MATLAB" [2 SWS], (ii) a lecture "Functional MRI data analysis" [2 SWS], and (3) a practical course [5 SWS] and a seminar "Experiments on Neurocognition" [1 SWS] including aspects of planning, performance and analysis of functional neuro-imaging studies using MATLAB based software.  
Stream 2 "Psychophysics of Hearing" comprises (i) exercise "Introduction to MATLAB", (ii) lecture and seminar "The sense of hearing", and (iii) a laboratory project in which psychoacoustical experiments into the function of the auditory system are performed.

Reader's advisory:  

Links:  
Language of instruction: English  
Duration (semesters): 1 Semester  
Module frequency: jährlich  
Module capacity: unlimited  
Reference text: Course in the second half of the semester  
Regular active participation is required to pass the module  
Modullevel: MM (Mastermodul)  
Modulart: Wahlpflicht  
Lern-/Lehrform / Type of program:  

Vorkenntnisse / Previous knowledge:  
Examination: Final exam of module  
Time of examination: end of summer term  
Type of examination: 70% report or oral exam or written exam, 30% presentation (talk or poster)

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td></td>
<td>2.00</td>
<td></td>
<td>28 h</td>
</tr>
<tr>
<td>Practical</td>
<td></td>
<td>6.00</td>
<td></td>
<td>84 h</td>
</tr>
</tbody>
</table>

Total time of attendance for the module: 140 h