psy270 - Functional MRI Data Analysis

Module label: Functional MRI Data Analysis
Module code: psy270
Credit points: 9.0 KP
Workload: 270 h
Used in course of study:
- Master's Programme Neurocognitive Psychology > Master module
Contact person: Carsten Gießing

Entry requirements:
Enrolment in Master’s programme Neurocognitive Psychology.

Skills to be acquired in this module:
Goals of module:
Students will learn the basics about planning and performing a neuroimaging study. They will focus on the statistical and methodological background of functional neuroimaging data analysis and analyse a sample functional MRI data set.

Competencies:
++ experimental methods
++ statistics & scientific programming
+ data presentation & discussion
++ group work

Module contents:
Part 1: Functional MRI data analysis (lecture)
Part 2: Planning, performance and analysis of functional neuroimaging studies using MATLAB-based software (seminar)
Part 3: Hands-on fMRI data analysis with SPM (practical course)

Reader’s advisory:

Links:
Language of instruction: English
Duration (semesters): 1 Semester
Module frequency: The module will be offered every summer term.
Module capacity: 15 (The remaining places are reserved for Biology and Neuroscience students.)
Reference text: Since the module is primarily offered for the Master's programme Biology it has to be offered as a blocked course. Please contact us if you are interested in the module but have problems with interfering other courses.

PLEASE NOTE:
We strongly recommend to take either psy170, psy270, psy275, psy280, or psy220 to gain methodological competencies (EEG, fMRI, TBS, HCI) that are needed for most practical projects and Master's theses!

Module level: MM (Mastermodul / Master module)
Modulart: Wahlpflicht / Elective
Lern-/Lehrform / Type of program: Part 1: lecture; Part 2: seminar; Part 3: practical course

Vorkenntnisse / Previous knowledge:

Examination:
Final exam of module:
Time of examination: end of summer term
Type of examination: Oral or written examination Bonus for active participation (e.g. presentations, creating study material for other participants, tandem learning or oral contributions)

Course type:
Lecture:
Comment: 2.00
SWS: Frequency: SuSe
Workload attendance: 28 h
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<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
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<tbody>
<tr>
<td>Practical</td>
<td></td>
<td>4.00</td>
<td>SuSe</td>
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<tr>
<td>Seminar</td>
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Total time of attendance for the module

98 h