neu220 - Neurosensory Science and Behaviour - Part B

Module label: Neurosensory Science and Behaviour - Part B
Module code: neu220
Credit points: 6.0 KP
Workload: 180 h
Used in course of study:
- Master's Programme Biology > Background Modules
- Master's Programme Neuroscience > Background Modules

Contact person:
Module responsibility
- Christiane Margarete Thiel
Authorized examiners
- Alle hier genannten
Module counselling
- 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

Upon successful completion of this course, students
know the fundamentals of neurotransmission
know the basic neural mechanisms underlying attention, learning, emotion, language and
executive functions
understand the relationship between disturbances in neurotransmitter systems, cognitive
functions and psychiatric disease
know the principles of drug treatment for psychiatric disorders
have in-depth knowledge in selected areas of these topics
are able to understand, explain and critically assess neuroscientific approaches in animals and
humans
are able to understand and critically assess published work in the area of cognitive neurosciene

Module contents
The lecture "Introduction to Cognitive Neuroscience" gives a short introduction into neuroanatomy
and cognitive neuroscience methods and
then covers different cognitive functions.
Lecture topics:
- History of cognitive neuroscience
- Methods of cognitive neuroscience
- Attention
- Learning
- Emotion
- Language
- Executive functions.
The supervised excersise either deepens that knowledge by excersises or discussions of recent
papers/ talks on the respective topic covered
during that week.
The lecture "Psychopharmacology" illustrates the connection between neurotransmitters and
behaviour and its links to psychiatric disease. The
lecture contains several interactive parts to consolidate and critically evaluate the acquired
knowledge.
Lecture topics:
- Introduction to Terms and Definitions in Drug Research
- Dopaminergic and Noradrenergic System
- Cholinergic and Serotonergic System
- GABAergic and Glutamatergic System
- Addiction
- Depression
- Schizophrenia
- Anxiety
- Alzheimer's Disease

Reader's advisory

Links
Language of instruction: English
Duration (semesters): 1 Semester
Module frequency: jährlich
Module capacity: 30
Reference text: Course in the second half of the semester
Regular active participation is required to pass the module.

Modulart: je nach Studiengang Pflicht oder Wahlpflicht

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<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>as agreed, usually in the break after the winter</td>
<td>100% written exam (content of the lectures) term</td>
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<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>
<td></td>
<td>3.00</td>
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<td>42 h</td>
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<td>Exercises</td>
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<td>1.00</td>
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Total time of attendance for the module: 56 h