neu720 - Statistical programming in R

<table>
<thead>
<tr>
<th>Module label</th>
<th>Statistical programming in R</th>
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<tbody>
<tr>
<td>Module code</td>
<td>neu720</td>
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<tr>
<td>Credit points</td>
<td>6.0 KP</td>
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<tr>
<td>Workload</td>
<td>180 h</td>
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<td>(1.5 SWS Lecture (VO) Total workload 68h: 28h contact / 20h background reading / 20h exam preparation 2.5 SWS Supervised exercise (UE): Total workload 113h: 28h contact / 20h background reading / 65h exercise solving)</td>
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Used in course of study
- Master's Programme Biology > Skills Modules
- Master's Programme Neuroscience > Skills Modules

Contact person
Module responsibility
- Fabian Otto-Sobotka

Authorized examiners
- Fabian Otto-Sobotka

Entry requirements

Skills to be acquired in this module
- Social skills
- Interdiscipl. knowlg.
++ Maths/Stats/Progr.
- Scientific English

Module contents
The lecture gives an intuitive introduction into the use of the statistics software R. We start by introducing the basic handling of R and the syntax of its programming language. We use those to obtain the first statistical analyses from R. The next important step is to create informative graphics to represent the statistical results. Finally, we look into programming concepts that allow for more complex statistical analyses.

Reader's advisory
R Core Team - R: A language and environment for statistical computing (Reference Manual)

Links
- Language of instruction: English
- Duration (semesters): 1 Semester
- Module frequency: annually , summer term
- Module capacity: 24
- Reference text: Recommended previous knowledge / skills: basic statistical knowledge including regression analysis
- Module level: ---
- Modulart: je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
- Type of program
- Vorkenntnisse / Previous knowledge: basic statistical knowledge including regression analysis

Examination
- Time of examination: after the course
- Type of examination: practical exercise

Final exam of module
- Course type
- Lecture: 2.00
- Exercises: 2.00

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<tr>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
</tr>
<tr>
<td>Exercises</td>
<td>2.00</td>
<td>SuSe</td>
<td>28 h</td>
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Total time of attendance for the module
- 56 h