Module label: Statistical programming in R
Module code: neu720
Credit points: 6.0 KP
Workload: 180 h
(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)

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

students learn the use of the software R in application scenarios
students learn to actively "speak" the programming language R
students practice statistical data analysis with R

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: ---
- Modular: je nach Studiengang Pflicht oder Wahlpflicht
- Lern-/Lehrform / Type of program: basic statistical knowledge including regression analysis

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

Course type
- Comment SWS Frequency Workload attendance
  - Lecture 2.00 SuSe 28 h
  - Exercises 2.00 SuSe 28 h

Total time of attendance for the module: 56 h