neu720 - Statistical programming in R

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
Modullevel                 ---
Modulart                   je nach Studiengang Pflicht oder Wahlpflicht
Lern-/Lehrform / Type of program

Vorkenntnisse / Previous knowledge
basic statistical knowledge including regression analysis

Examination

Final exam of module

Time of examination after the course
Type of examination practical exercise

Course type

Lecture
Exercises

Comment
2.00
2.00
SWS
SuSe
SuSe

Frequency

Workload attendance
28 h
28 h

Total time of attendance for the module
56 h