Course information

Course number	8914.19
ECTS	2.00
Title	R for statistics - basic course in the statistical program R and RStudio.
Aim	Introduction to the statistics program R and RStudio with the aim to become familiar with the basic structure and use of the programs doing standard statistical analyses and data visualization.
Content	To read data into R, including loading data from other programs, e.g. Excel, and to write/export data. Learn to use R data structures to manipulate and explore data. To use R packages. To visualize data in R using plotting functions and investigate data distributions. To use basic statistical methods such as t-test and regression analyses in R to analyse data and understand the output of analyse. To enable students to explore more on their own.
Learning and teaching approaches	Lectures and individual, supervised hands-on computer exercises with open-source R and RStudio.
Assessment method	The assessment is based on the following elements: - active participation in the course and 100% attendance - multiple choice exam at the end of each day - passed/not passed grading (internal)
Examination	Internal
Grading scale	Passed/Not Passed
Literature	Will be provided before course start
Prerequisites	The student must bring own PC, have downloaded RStudio and files provided. The student must have an understanding of basic statistical principles.
Learning outcomes	As a result of this course, the student will be able to - describe the basic structure of R/RStudio - apply RStudio to input data, and to use tidy data for statistical analysis. - produce and use R-code for statistics. - produce tables, plots and reports, - perform basic statistical analyses in Rstudio - Interpret output from basic statistical analyses in Rstudio - organize RStudio projects for reproducible research
Level	Ph.D.
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