



PhD Course

Introduction to R

block course: 09.09. 2024 09:00 – 16:00; 10.09. 2023 9:00 – 16:00

ESP 36, 4030/31

Course Instructor: Dr. Clara Pott

Course Value: 1 SWS or 2,5 CP

Assessment/Student evaluation: Home assignment; grading will be pass/fail.

Course Language: English

Software: R and RStudio

Prerequisites: The installation of R and RStudio is required before the course. Links to the installation of R and RStudio can be found [here](#). If you have trouble, you will get help on the first day of the course.

Registration: Please register via STiNE. For all organizational matters please contact e-mail andrea.buekow@uni-hamburg.de.

Course Overview & syllabus:

This course will provide students with an introduction and hands-on training for analyzing data with the R programming language for statistical computing. Students will learn how to use add-on packages in R and which packages are especially useful. The course will cover data input and output, data management, data manipulation, regression analyses and data visualization in R. By the end of the course students will be enabled to read data into R, recode data, perform statistical analyses, understand programming syntax and create informative graphs. The course will consist of lecture and practical parts, where students apply the skills taught to real data.

The course is designed for PhD students of the Research Training Group 'Managerial and economic dimensions of health care quality' and it will put special emphasis on the subdiscipline of health economics / health care management.

Day 1 = 9 September 2024, 09h00 – 16h00:

- Why to use R and how to get started?
- Basic syntax
- Data import and export
- Data manipulation and recoding
- Summarizing data

Day 2 = 9 September 2024, 09h00 – 16h00:

- Graphics in R
- Regression analyses
- Missing data
- Other areas of application of R