



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](mailto: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.

Why to use R and how to get started?	09.09. 09:00- 16:00
Basic syntax	

Data import and export	
Data manipulation and recoding	
Summarizing data	
Graphics in R	10.09. 9:00-16:00
Regression analyses	
Missing data	
Other areas of application of R	