



26-28 March 2018

Course description

This course has two major goals. First, participants are introduced to the R environment. The focus will be on how to integrate R into an effective and reproducible scientific workflow, ranging from data handling and data analysis to the production of high-quality graphics and interactive documents. Second, participants are introduced to linear models. We will start with simple linear regression and progress to multiple regression and generalized linear models. We will also take a first glance at linear mixed effects models. We will stress the importance of diagnosing our models and to present the results graphically.

The course will be a combination of short lectures interspersed with demonstrations by the instructor and large parts will be devoted to practical applications by the participants.

Duration: 3 Days with 4 Sessions (à 2 hours); 9:00-17:00

Overview

Day 1

- using R (objects, functions, projects, scripts, RStudio, reading data, data types, packages)
- simple linear regression
- visualization of data and models

Day 2

- interactive documents with Rmarkdown
- multiple regression and general linear models

Day 3

- generalized linear models
- R as a programming language (loops, functions, randomization)
- mixed effects models

Registration: <http://survey.cbs.mpg.de/index.php/534197/lang-en>

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Organiser

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Venue

Max Planck Institute for Human Cognitive and
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Seminar Room C402

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