

## Introduction to R

### Course content:

The aim of this course is to introduce knowledge of using R, and programming with R.

The focus will be on R basics, important command structures and efficient working with R.

As the most frequent goal of R users is successful applied statistical modeling, application of (descriptive) statistical concepts will be the motivating use case throughout this course (but as the focus is on getting to work with the software R, a (thorough) introduction of statistical concepts will not, or only play a very minor role).

The course has a modular structure and participation in individual events is also possible.

Participation requirements: basic statistical knowledge, knowledge in R not necessary.

Language of instruction is English.

<b>Lecturer:</b>	Dr. Holger Sennhenn-Reulen (NW-FVA)
<b>Date &amp; time:</b>	Thursdays from 9:30 am to 1 pm, starting on May 16 (for detailed schedule see below).
<b>Place:</b>	<a href="#">FSR 1.1</a>
<b>Credits:</b>	none – due to the modular way of the course

**Registration:** Please send an email to [serena.mueller@forst.uni-goettingen.de](mailto:serena.mueller@forst.uni-goettingen.de) with your affiliation.

### Schedule:

- 16.05.: Intro (What is R?), R basics, Object types, manipulating character strings, ...
- 06.06.: Graphics: Visualization of data using base R plotting commands and the ggplot "ecosystem"
- 13.06.: Programming for 'automation' of the repetition of structurally identical commands: Repetition of a command – with objects remaining the same, or changing – with a predetermined or flexible number of repetitions; Conditional execution of various tasks; Generalization of tasks by defining functions.
- 20.06.: Working with "real data" and simulating "fake data".
- 27.06.: Introduction to RMarkdown