

Reproducible Documents with `{ rmarkdown }`

Instructor: **Selina Baldauf**

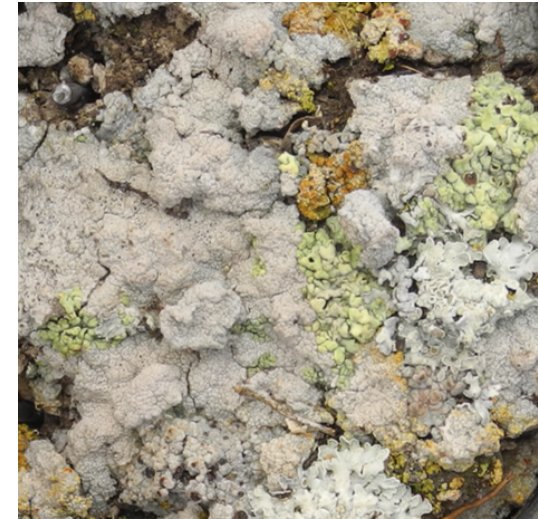
Freie Universität Berlin - Theoretical Ecology



2022-22-03 (updated: 2022-03-28)

Who am I?

- Scientific modeller with ecology background
- Working in the **theoretical ecology group** at Freie Universität
- PhD student at Freie Universität Berlin
 - Topic: Modelling the impact of biological soil crusts on dryland hydrology



Teaching

- Statistics with R for Biology Master students
- Workshop "Introduction to Data analysis with R"
- Workshops on R packages, R development, ...



The Workshop: Topics

- Day 1: Introduction to the R Markdown package
 - What is it?
 - What can you do with it?
 - Basic functionality
- Day 2: More advanced features and other document types
 - Citations
 - Additional output types
 - Format tables
- Day 3: Bring your own data
 - Optional



The Workshop: Schedule and Organization

 1 p.m. - 5 p.m.

 We will meet in the `General` meeting on Webex

Organization

- Input sessions
 - Presentation and demonstration of a topic
 - Some examples
- **Tasks** regarding this topic
 - Two groups: Only chat or meeting
- **Joint discussion** of tasks and additional questions

The Workshop: Material

- All material can be found on the [workshop's website](#)
 - Presentations
 - Tasks
 - Solutions
 - Additional resources

Bring your own data

Learning by doing

- Create your own documents
 - Use methods learned in the course
 - Try something new
 - Create the document that you actually need or want to learn
- It is optional
 - Think about it and let me know tomorrow afternoon if you want to participate
 - If you already know: add your name to the [joint document](#)
- If you want to try something specific: Let me know and I can check for resources etc. before

Before we get started I

Any feedback and questions are very welcome.

I am curious to know

- What you liked/disliked
- Which topics or methods you missed
- Which tasks were too easy/too difficult or just right
- ...

Before we get started II

I assume that you already know things like:

- Creating new projects or documents in RStudio
- Basic functionality of RStudio e.g. Console vs. Script, etc.
- Basics of R: concept of variables, functions, packages, ...
- Also, I will use some (but very few) code examples where I use functions from the `tidyverse` packages (`ggplot2`, `dplyr`)

But we probably have very different R skills and levels in the group, so **please ask if anything needs more explanation**

Before we get started III

Did anyone have problems installing the R Markdown?