

# Reproducible Documents with { rmarkdown }

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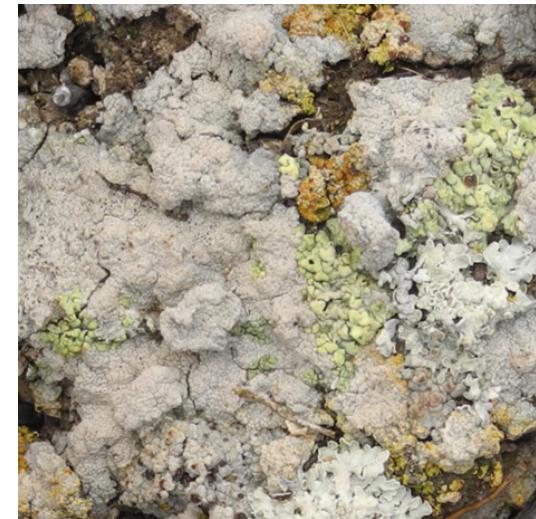
Freie Universität Berlin - Theoretical Ecology



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# 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
  - In groups: You can start a meeting in the groups or use the chat
- 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/packages/examples etc. before

# Before we get started I

Any feedback and questions are very welcome.

I am curious to know

- What you liked/disliked
- If the time was enough for the tasks
- If you missed some topics
- ...

# 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, ...
- I will use some code examples with functions from the `tidyverse` packages (`ggplot2`, `dplyr`)

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

- There are always some extra tasks for the fast ones that you can but don't have to do

## Before we get started III

Did anyone have problems installing the R Markdown?

# Feedback

Please take 5 mins to complete the feedback survey for the Graduate center (don't use Internet Explorer)

<https://votingo.cedis.fu-berlin.de/survey/P93BAL>

Please take another 5 mins to complete my more specific survey to further improve the course

<https://forms.gle/rpMtG843dT9pSNmu7>

# Feedback and Questions

- Any other feedback/comments/questions from your side?

# The End

Thanks a lot for participating!



Artwork by Allison Horst