Open Science Practices: Implementing a Reproducible Analysis Workflow

SoSe2024

Daniela Palleschi

Humboldt-Universität zu Berlin

2023-04-12

Overview

- Welcome!
- Course Moodle
  - Learning objectives
  - What you will not learn in this book
  - Course credits

Welcome!

- the language of instruction is English

- you will need a laptop in class from May 6h

- and a recent installation of

  - R

  - RStudio

  - tinyTex

Course Moodle

Course name: Open Science Practices: Implementing a Reproducible Analysis Workflow
Enrolment Key: r4repro

- course documents are available as HTML slides and PDF

- a course website will be up and running shortly

Learning objectives

- learn basic concepts of Open Science in the scope of language research

  - focus on reproducibile analysis

- create and maintain self-contained analyses projects

- develop good habits for project management

- learn how to transparently write up analyses for a paper or thesis

- learn about concepts like version control and containerization

What you will not learn in this book

- how to analyse data

- how to fit models

- how to plot data

- how to design an experiment

- we will not explicitly learn how to do these things, although we will be running simple code to achieve these goals

Course credits

- 4 LP
  - 1LP: participation and readings
  - 1LP: in-class exercises and preparation
  - 1LP: 2 in-class quizzes (0.5LP each)
  - 1LP: a pre-registration (1LP)

Session Info

Save your session info at the end of each document. Our results very often depend on the version of R/RStudio/a package we used. This is a great first step towards creating a reproducible workflow!

```
R version 4.3.0 (2023-04-21)
Platform: aarch64-apple-darwin20 (64-bit)
Running under: macOS Ventura 13.2.1

Matrix products: default
BLAS:   /Library/Frameworks/R.framework/Versions/4.3-arm64/Resources/lib/libRblas.0.dylib
LAPACK: /Library/Frameworks/R.framework/Versions/4.3-arm64/Resources/lib/libRlapack.dylib;  LAPACK version 3.11.0

locale:
[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8

time zone: Europe/Berlin
tzcode source: internal

attached base packages:
```

References