





Zurich-Basel Plant Science Center

PhD Program in Plant Sciences: Reporting using R Markdown, Quarto & Shiny

Lecturers:Dr. Jan WunderLocation:ETH Center, CLA J1Dates:July 05 & 12, 2024

Credit Points: 1 ECTS

Course Objectives

R Markdown, Quarto and Shiny are powerful R tools for static and dynamic reports, publications and dashboards that can be created fully reproducible using a highly intuitive notebook interface. In this course, you will learn to create Markdown documents consisting of code, text and the YAML header. We will use CSS files to format our reports and look at further customizations like section headings, citations, cross-references, animations, interactive plots, tables, comments and many more. While the main focus of this course will be on R Markdown and Quarto, we also will introduce Shiny for interactive web applications, shinythemes and htmlwidgets – and last but not least learn how to embed Shiny into R Markdown and Quarto docs. Depending on the course progress, there will be scope for individuals to work on small projects and / or their own data sets.

Prior Knowledge:

Basic knowledge of R / attendance of the course "Introduction to R"

Number of Participants: Participation is limited to 16 people.

Note: Students are required to bring their own computers: Please make sure that you install the most recent versions of R and RStudio.

Individual Performance and Assessment:

In order to obtain the credit points, participants are required to attend *both* course days and hand in an assignment to be carried out at home. The details will be explained during the course. The assignment is due no later than one week after the course has ended.