

Syllabus

Mastering R Skills

- **Instructor:** Gergely Daroczi
- **Credits:** 1 (2 ECTS)
- **Term:** Spring 2018-2019
- **Course level:** MA/MSc
- **Prerequisites:** Data Analysis 1,2,3, R Skills
- **Course drop:** Course can be dropped free of charge 24 hours after the first session. After this date drop is possible until the course is halfway over (late drop fee applies). No changes are allowed past that date.

Course description

This class focus on actual programming questions and problems related to R -- that will help you writing more elegant, reliable and performant R applications. The course is a follow-up to Data Analysis 1 Foundations and the R Skills classes, and is focused on how to use R as an interactive scripting language for various data analysis tasks, covering topics like

- Writing and documenting R functions
- Debugging and profiling R scripts and functions
- Refactoring R scripts
- Developing R packages
- Writing unit tests and running those in an automated way
- Logging, database connections

Learning outcomes

At the end of this course, you will have a good understanding on how to structure and deploy R scripts and packages for production.

Reading list

Class materials will be available on GitHub.

Assessment

- Weekly homeworks (50%)
- Final take-home assignment (50%)

To pass, students will need to get at least 50% of the overall grade AND at least 50% of the final take-home assignment. Failure to do so, will yield a Fail grade.

Technical/laptop requirement

Students are required to bring their own laptop with the most recent version of R and RStudio installed.