

Overview of materials for PhD Skillz workshop

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This git repository

This git repository contains a number of R (and Matlab) tutorials. Taken together the lectures cover about six meetings worth of materials. Lecture files are numbered in the recommended order of going through them. Topics covered include the following:

- Preliminaries: Version control, code style guides, and code documentation.
- Data wrangling: Turning the data into the form you need (e.g., *dplyr* in R). Quick primers are available online for both R (<https://rstudio.cloud/learn/primers/1>) and Matlab (<https://www.mathworks.com/help/matlab/getting-started-with-matlab.html>).
- Data visualization:
 - General principles
 - How to plot in R (*ggplot*, *plotly*) / Matlab
- Documenting your code:
 - R Markdown / MatLab notebook
- Introduction to confidence intervals

The course focuses on learning what tools are available and on *examples* of use (rather than an in-depth tutorial). There are great online tutorials and cheat sheets that contain further information.