

Welcome to the 2023 R workshop!

A hopefully more-or-less painless introduction to R

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About

The statistical programming software ‘R’ is one of the most widely used tools for data exploration and analysis, and a basic ability to use R (for data processing, statistical analysis, simulation modeling and production of high-quality figures) will make upcoming research projects less intimidating and more productive (and fun!).

This workshop consists of a series of short(ish) modules, each of which covers a particular aspect of working with data (e.g., read and writing data to/from files, making exploratory plots). Each module will consist of a set of lectures and demos (worked examples), followed by hands-on activities. The main goal of this workshop will be to ensure participants have enough proficiency and confidence with data operations and programming in R to engage in productive, self-directed learning and problem-solving.

The workshop is primarily intended for students with little prior experience with R. The first modules will focus on R syntax, data management (loading data, writing to file), data visualizations, and data “wrangling”. The second set of modules will focus on R packages (loading, getting help), programming operations (loops, functions, debugging etc.), statistics, and spatial analyses.

All code will be available as scripts that you can download from this website (at the top of each module page on this website) and load in RStudio. That way you won’t need to constantly copy and paste from the website!

Before we get started...

Before we dig in and get started with the modules, you should have installed R and RStudio. Here are some links to help you get started:

Download and install R

Download and install RStudio (use free version!)

Okay, now we’re ready to go!

—go to first module—