

Intro to R



USC SPEC Lab Summer 2022

The goal: In this module, you will learn the basics of R—why it works, and how we use it. We will start with an overview of R for the social sciences. Then we go over what data look like in R, how to perform basic operations on it, and how to save it on your computer. By the end, you should be familiar with vectors, objects, and arithmetic

1. Introductory Videos

[R for Social Science: A Big Picture Introduction](#)

[Introduction to R and R Studio](#)

[R Scripts for Collaborative Social Science: Headers, Packages, and Working Directories](#)

[Creating and Manipulating Vectors in R](#)

[Loading and Saving Datasets in R](#)

2. Walk Through Work

Start Here! Intro to R

Calculations & Operations

Vectors & Tibbles

3. Group Work

The Swiss Stock Market Exercises

4. External Resources

- Download R from: <http://www.cran.r-project.org>
- Download RStudio from: <https://www.rstudio.com/products/rstudio/download/>
- Outside Viewing: “001 How to download and install r” (<http://www.twotutorials.com/>)

- Also from Twotutorials:
 - [01 "How to download and install R"](#)
 - [10 "How to read csv files into R"](#)
 - [13 "How to read SPSS, STATA and SAS files into R"](#)
 - [14 "How to read an excel file .xls and .xlsx into a data frame with R"](#)
 - [15 "How to work with character strings in R"](#)
- "Creating new variables" (<http://statmethods.net/management/variables.html>)
- "Data Types" (<http://statmethods.net/input/datatypes.html>)
- "Factors" (http://www.cookbook-r.com/Manipulating_data/)
- We also recommend the following exercises via Swirl in R: (<http://swirlstats.com/students.html>)
- We recommend "R Programming" lessons:
 - [1 \(Basic Building Blocks\)](#)
 - [2 \(Workspace and Files\)](#)
 - [3 \(Sequences of Numbers\)](#)
 - [4 \(Vectors\)](#)
 - [6 \(Subsetting Vectors\)](#)
 - [7 \(Matrices and Data Frames\)](#)