Introduction to R and RStudio for Statistics Courses

William Murrah

2021-08-18

Contents

Chapter 1

Why R and RStudio?

Chapter justifying the use of R and RStudio

Chapter 2

Installing R and RStudio

Installing software.

2.1 Installing R

2.2 Installing RStudio

Chapter 3

A Tour of R and RStudio

Learn the basics of using R and RStudio

Chapter 4

R As a Statistical Programming Language

This chapter describes R as a statistical programming language to give you some basic concepts to understand how R works.

Chapter 5

Files, Directories, and Projects

5.1 Equations

Here is an equation.

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k} \tag{5.1}$$

You may refer to using `\@ref(eq:binom)`, like see Equation (5.1).

5.2 Theorems and proofs

Labeled theorems can be referenced in text using `\@ref(thm:tri)`, for example, check out this smart theorem 5.1.

Theorem 5.1. *For a right triangle, if c denotes the* length *of the hypotenuse and a and b denote the lengths of the* ***other*** *two sides, we have*

$$a^2 + b^2 = c^2$$

Read more here https://bookdown.org/yihui/bookdown/markdown-extensions-by-bookdown.html.

5.3 Callout blocks

The R Markdown Cookbook provides more help on how to use custom blocks to design your own callouts: https://bookdown.org/yihui/rmarkdown-cookbook/custom-blocks.html