Additional Help and Resources

R and RStudio Resources

R

- Download: R from CRAN
  - This is where you can download the R language software for FREE for your own computer.
  - Choose your operating system (Mac OS or Windows or Linux/Unix)
  - NOTE: For Windows, you should also download and install Rtools - this is technically optional, but is useful to have. Make sure to download the one for your R version.
- R Cookbook

RStudio

- Download: RStudio IDE Desktop
  - Note: Windows is listed at the top - just scroll down to see the installer for the Mac OS as well. There are also installers for the versions of Linux/Unix.
- RStudio Education
- RStudio Cloud Tutorials
- ** Quick-R **

RMarkdown Resources

- Rmarkdown Tutorial
- Book: R Markdown: The Definitive Guide
- Book: R Markdown Cookbook

R Graphics

- Book: `ggplot2`
- R Graphics Cookbook - online book
- Cookbook for R (graphics) - earlier version
- R Graph Gallery
- Book: R Graphics, 3rd edition by Paul Murrell and accompanying R Graphics - book website
- R Charts Website
- Book: Interactive web-based data visualization with R, plotly, and shiny
- Book: R For Data Science - Layers

R Packages for Tables

Making Tables *(without Rmarkdown)*

- The `table()` function, run `help(table, package = "base")`
- `gtsummary`
- `gmodels`, see `CrossTable()` function

Rmarkdown Tables

- `gt`
- `gmodels`
- `gtsummary`
- `arsenal`
- `huxtable`
- `flextable`

Tables with Graphics

- R Gallery Tables Summary
- `gtExtras`
- `skimr`

Online Training and Courses

- Code Academy
- Software Carpentry
- swiRl - Learn R in R
- Datacamp
  - R for SAS Users - My Datacamp Course
- Coursera
  - Reproducible Templates for Analysis and Dissemination - My Coursera Course
- My Courses at Emory:
  - Emory N741
  - Emory N736

More Helpful Online Books on R and Statistics with R

- Book: Statistical Inference via Data Science
- Book: The Epidemiologist R Handbook
- Book/Course: Stat 545
- Book: Statistical Inference via Data Science: A ModernDive into R and the Tidyverse
- Book: R in Action
- OpenIntro Statistics
- Mastering Software Development in R

Other places to get HELP

- StackOverflow
  - I encourage you to create an account so you can post questions. But even without an account you can search for and find answers to your questions and error messages.
- Google
  - You can often cut and paste error messages in Google to find answers - most likely will redirect you to Stack Overflow.
- Package vignettes for packages on CRAN
  - Here is one vignette for dplyr
  - These will often help you get started.
- Github package issues

  - Many packages will host their code on Github which includes an "issues" tab. This can be a good place to see what other problems people may be having with a given package.
  - dplyr issues on Github

- CRAN package site
  - dplyr on CRAN - spend time looking at:
    * the README for the package or
    * bug reports or
    * NEWS which will detail the changes for each version updates

- R Bloggers
  - This is a really good website which curates thousands of people who are R developers, users and programmers who post articles about R.

- STHDA Website for "Statistical tools for high-throughput data analysis"
  - This website will often come up when "Googling" for answers. It has a lot of ads but often has very helpful examples.

- Quick-R
  - This website was originally created by Robert I. Kabacoff, who wrote the Book: R in Action.
  - However, the website has now been taken over by Datacamp.

R Packages Used in TIDAL Modules

- tidyverse