

Resources for installing R & RStudio and getting started

Many of the biostatistics courses in the SPH are taught using the statistical computing software R, and within the application RStudio. Below are links for downloading these programs, as well as resources to help get you started in learning how to use them.

Please make sure you have both R and RStudio installed on the first day of BSTA 526 so that you can follow along in class.

1. Install R and RStudio

- a. R and RStudio are two separate programs. You must install R first. Then install RStudio desktop. Even if you have R installed already, I highly recommend installing the latest version if it has been a while since you installed it.
- b. Install R (first)
 - i. Windows: Download from <https://cran.rstudio.com/bin/windows/base/> from the link "Download R 4.5.2 for Windows"
 - ii. Mac OS X: Download the latest .pkg file (top link, currently R-4.5.2.pkg) from <https://cran.rstudio.com/bin/macosx/>
- c. Install RStudio Desktop Open Source License (second)
 - i. Select download file corresponding to your operating system from <https://posit.co/download/rstudio-desktop/#download>
- d. Prefer tutorials or videos? Check out some of these options:
 - i. Kristen Sosulski's *Installing R and RStudio* (2024):
<https://www.youtube.com/watch?v=3f8TMPOZTLE>
 - ii. Tutorial on downloading R and RStudio: <https://learnr-examples.shinyapps.io/ex-setup-r/>
 - iii. OpenIntroOrg's YouTube video:
<https://www.youtube.com/playlist?list=PLkIsevEzpM73U-0ONpe7eHp2WCultVWQ>
 - iv. Installing R and RStudio on your own pc:
<https://www.youtube.com/watch?v=kOQDdjZ7HI4>

2. Get started with R and RStudio

- a. Intro to R & RStudio notes for 1st day of BSTA 511/611 in Fall 2025
 - i. https://niederhausen.github.io/BSTA_511_F25/slides/Day01_bsta511.html
- b. RStudio tutorials (don't need R on your own computer to run these):
<https://posit.cloud/learn/primers>
- c. RYouWithMe is a series pf videos showing how to use R, created by R-Ladies Sydney
 - i. <https://rladiessydney.org/>
 - ii. Tour of RStudio in the BasicBasics section.
 - iii. The other sections go into data wrangling (CleanItUp), data visualization (VizWhiz), and Markdown (MarkyMark).
- d. R bootcamp: <https://r-bootcamp.netlify.app/>