

# R Companion

STAT 315

## Getting Started

R is the base version of a free, open-source statistical computing program. R Studio is a nice graphic user interface (GUI) that works in conjunction with R. We will be using R Studio this semester as it is easier to learn how to use and has many nice shortcuts that aren't available in the standard R download.

Note: R and R Studio can not be installed on Chromebooks or other tablets/mini-computers. If you only have a tablet or a mini-computer, you can use R Studio Cloud

To begin using R Studio, you will need to install "R" first and then install "R Studio" on your computer.

### Step 1: Download R

- (a): Visit <https://www.r-project.org/>
- (b): Click **CRAN** under **Download**
- (c): Select any of the mirrors
- (d): Click the appropriate link for your type of system (Mac, Windows, Linux)
- (e): Download R on this next page.  
(For Windows, this will say **install R for the first time**. For Mac, this will be under **Latest release** and will be something like **R-4.1.0.pkg** – the numbers may differ depending on the most recent version)
- (f): Install R on your computer

### Step 2: Download R Studio

- (a): Visit <https://www.rstudio.com/products/rstudio/download/#download>
- (b): Click to download
- (c): Install R Studio on your computer

### Step 3: Verify R Studio is working

(a): Open R Studio

(b): Let's enter a small dataset and calculate the average to make sure everything is working correctly.

(c): In the console, type in the following dataset of five homework scores:

```
x = c(90,75,100,85,90)
```

(d): In the console, calculate the average of the five homework scores:

```
mean(x)
```

```
## [1] 88
```

(e) Did you find the average of the five homework scores was 88? If so, you should be set up correctly!