

# Section 0: Setting up R

*Ed Rubin*

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Before our first section, please run make sure you have working and up-to-date installations of R and RStudio. We will make use both extensively in this course/section, so it is definitely worth doing right.

## 1 Installation

If you do not already have R and RStudio running on your computer, then you should install them both:

1. Download R.
2. Download RStudio. RStudio is a super helpful IDE (integrated development environment) for R. Very helpful for learning and using R.

If you already have R and RStudio on your computer, then you should make sure they are up to date. The current R version is 3.3.2 (a.k.a. *Sincere Pumpkin Patch*). You can check your version of R by typing `version` into the R console. The current version of RStudio is 1.0.136.

I would also recommend making sure you have a working installation of LaTeX (ShareLaTeX is another nice tool that also has a lot of LaTeX help/tutorials). Pandoc is also also helpful.

## 2 Does it work?

Open RStudio. Type `1 + 1` in the console. Do you get 2? If so, it looks like things are working.

## 3 Resources for R

I've compiled a pretty large set of resources for R. You probably don't need them right now, but know they are there.

## 4 Basic suggestions

0. Nearly everything you do should be in an R script, as opposed to the command line. You will want to return to your code at some point, an R script makes this possible (plus you have to turn in your R script with your assignments).
1. Comment your code.
2. Be consistent with your coding conventions (especially naming).
3. Be smart when naming files, folders, *etc.*.
4. Make your life easier by organizing your files, directories, and using R's `paste0()` (or `paste()`). See examples in Section 1.