

# Introduction to R Course

This repository (<https://github.com/pcmathias/AACC-Introduction-to-R>) contains the course content for How to Truly “Excel” at Data Analysis and Visualization: An Introduction to the R Programming Language at AACC 2018 on July 29, 2018. This course is intended as an introduction for clinical laboratory professionals who have limited to no knowledge of computer programming or of the R language.

## Pre-course requirements

### Complete 1 week or more in advance of the course

To maximize our course time, please attempt to complete the following tasks *prior* to arriving:

1. Install (or update) R from Comprehensive R Archive Network (CRAN) at <https://cloud.r-project.org>. Select the version of R for your operating system (Windows, Mac OS, Linux).
2. Download and install RStudio at <https://www.rstudio.com/products/rstudio/download/#download>. Select the installer for your Operating System.
3. Launch RStudio after installation. On the left side of the screen (the Console tab), install the tidyverse package by copying and pasting the following code into your Console and hitting enter:  
`install.packages("tidyverse", dependencies = TRUE).`
4. Complete the pre-course survey at <https://goo.gl/forms/9mal6vQKwWYiXjyd2>.

If you have any problems with steps 1-3 above, refer to the introduction lecture where there is more detail: (<https://github.com/pcmathias/AACC-Introduction-to-R/blob/master/01%20-%20Introduction%20to%20R.Rmd>). If you continue to have problems, please reach out to pcm10 uw edu.

## Preparing for the course

### Complete 1-2 days in advance of the course

The easiest way to get up and running with the content (to decrease set up time) is to follow these instructions a couple days before the course:

1. Navigate to the course webpage: <https://github.com/pcmathias/AACC-Introduction-to-R>
2. Download the .zip file with the repository contents using the “Clone or download” button (near the top right) and select “Download ZIP”
3. Unzip the file to a convenient destination that you will remember
4. Select “Set Working Directory” from the Session menu at the top of the screen in RStudio, then navigate to that location.

After you complete these steps, you will be able to open up the course files in RStudio, run completed lines or chunks of code, and fill in the blanks for exercises.