

Suggestions for Getting Started with R in Predict 401

Learning R requires practice. A new user faces a steep learning curve. Take advantage of the instructional materials provided. You will be required to take a test the third week of the course that requires R programming. This test assumes you have studied and completed the *Quick Start Guide for R*. You will also be required to write programs in R for the two data analysis assignments. These assignments give practical applications of the language.

By the end of the course you will have learned the following R basics: (1) how to read a data file into a data frame, (2) how to install R libraries, (3) how to write a for loop, (4) how to write a R function, (5) how to make a basic graphical object, and (6) how to fit an OLS regression model, as well as, (6) how to subset a data frame, use `aggregate()` and `apply()`. Acquiring skills in these areas will benefit you in future courses.

The suggestions which follow will help you succeed with R in Predict 401.

1. **R can be obtained at <http://cran.r-project.org/>.** Instructions are shown in 01_Installing R | RStudio located in the *Resources for R* module on the course site. If you have questions contact Todd Peterson, the TA. Other sources of information include the course texts.

RStudio is recommended for new users of R. It is not required. Everything students need to do in this course can be accomplished using the standard R console with a plain text editor. However, RStudio is an integrated development environment for R. Installer packages for RStudio are located at www.rstudio.com/. RStudio is easy to install and use.

2. **Read and complete the exercises in the *Quick Start Guide for R*.** Solutions are provided for these exercises. Study of this guide is recommended for new users of R. There is a test on the material in this guide due the end of the third session.

3. **Watch the R-related videos posted on the course site.** There is a video for each of the two data analysis assignments. Additionally, there are videos posted sequenced according to course sessions. These demonstrate the use of R on text book problems.

4. **If you have time**, take a look at the following resources in the *R Tutorial Materials* module.

- a. **View the Lynda.com Videos:** “Up and Running with R”, “R Statistics Essential Training”, and “Code Clinic: R”.
- b. **Try the basic R programming lessons in *SWIRL*.** These lessons are quick and give immediate feedback. They provide practice on aspects of the language.
- c. **During the quarter, study and complete the optional *Lessons in R*.** These are listed in the weekly sessions and involve applications of R to solve course-related problems. These lessons provide the opportunity for additional practice with R.

5. **Be aware of the informational pieces listed in the *Resources for R* module.** These informational pieces address questions that have come up in the past.