

R Camp 2019  
Prof. Jane Lawrence Sumner  
June 3-7, 2019

## Textbook

We will be using *Political Analysis Using R* by James E. Monogan III (Springer, 2015). Students can buy a hard copy of this book, or use the free e-book available on the library's website. Students are expected to read Chapter 1: Obtaining R and Downloading Packages before camp meets on Monday. I will also expect students to have downloaded R, as well as a text editor for R. I highly recommend students download RStudio (<https://www.rstudio.com/>), which is a free and very functional text editor and console program that allows you to write and execute R code all in one program.

## Materials

Students are expected to bring a laptop, a notebook or loose paper, and a writing implement of their choice to every class. Please remember to charge your laptop before coming to class, or bring a long power cord.

## Format

9am-10:45am: Instruction. We'll go over concepts and code in class. After class, I will distribute working examples of the class code. In class, I expect students to type out their code as we work through examples on the board. I realize that last year's code is online, but I ask you to please not look at that code in class. You will learn better if you work through it in real time. Trust me on this one.

10:45-11am: Break.

11am-12pm: Problem sets. Students will be expected to work through the problem sets in the textbook, either individually or in groups. Alternatively, I encourage students to work through what we have covered in class using their own data, if applicable. While students are not required to stay and work through the problem sets in class, I do encourage you to do so, so that I and your classmates can help you debug and work through problems. I will not collect the problem sets.

## Schedule

Monday	Chapter 2	Loading and Manipulating Data
Tuesday	Chapters 3-4	Visualizing Data and Descriptive Statistics
Wednesday	Chapters 5-6	Basic Inferences and Bivariate Association
		Linear Models and Regression Diagnostics
Thursday	Chapter 10	Linear Algebra with Programming Applications
Friday	Chapter 11	Additional Programming Tools