Pre-Class Setup

Before the class begins, you should have read the handout and watched the video on how to install R, RStudio, and Dropbox on your computer. This needs to be done before class begins, because we will begin with material on day #1 of the class.

This must be completed by Thursday, August 26th. If not, you will not be able to continue with this course.

Motivation and Setup

1. Class #1: What's the value of data science for the social sciences? And why would you want to take this class?

The Essentials of Data Analysis

2. Class #1, part 2 : A basic introduction to visualization
    1. Reference: Textbook, Chapter 3
    2. For a real-world discussion of how the BBC uses ggplot to produce its graphics, see How the BBC Visual and Data Journalism Team Works with Graphics in R (Links to an external site.)
    3. Homework #1 due Monday
3. Class #2 : Cleaning and transforming (aka "wrangling") data
    1. Reference: Textbook, Chapter 5
    2. Homework #2 due Monday
4. Class #3, part 1 : Exploratory data analysis
    1. Reference: Chapter 7
    2. Homework #3 due Monday

Importing, Tidying, and Combining Data

5. Class #3, part 2 : Learning the basics of RMarkdown [No homework assignment]
    1. Reference: Textbook, Chapter 27
6. Class #4 : Combining datasets
    1. Reference: Textbook, Chapter 13
    2. Homework #4 due Monday
7. Class #5: Importing and tidying data
    1. Reference: Chapters 11-12
    2. Homework #5 due Monday

Creating Maps and Working with Different Data Types

8. Class #6: An introduction to maps for spatial visualization
    1. Reference: None
    2. Homework #6 due Monday
9. Class #7, part 1: Working with date and time variables
    1. Reference: Textbook, Chapter 16
10. Class #7, part 2 : Working with string (text-based) variables
    1. Reference: Textbook, Chapter 14

The Final Exam will be distributed in the last week of class. The due date is October 25th.

Contacts

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Office Hours: By appointment