Week 2: Questions + R

Questions

Read and review my notes over questions in political science. Answer the review questions at the end.

Note that the review exercises form the basis of the quiz questions. If you can answer the review exercises, you can probably answer the exam questions.

Also, note that these review exercises won't take long, but take them seriously. As we settle into the semester, the assignments will become more difficult and take longer. As I mentioned on the first day, keeping up is key.

R

Read my notes on "Statistical Computing with R" (ch. 2 at the moment) and "Loading Data in R" (ch. 3 at the moment). Answer the review questions **throughout** the document as you work.

I made two videos to help you understand the assignment. You can find the videos in the "Course Media" section of Canvas.

- You can watch the video "Statistical Computing in R" as you work through the same-named chapter of the notes. The video is just me working through those notes along with you. Pause often to do the review exercises and experiment.
- You can watch the videos "How We'll Always Use R" and "Data Frames" after reading the chapter "Loading Data in R." The former talks about setting up a project in R (you might want to refer back to it when starting projects later). The latter talks about the concept of a "data frame" as a "box of vectors."

Other remarks about the assignment:

- This is a tedious assignment–you'll need to work carefully. I suggesting spreading the exercise over several different sessions to give you time to digest the ideas. Don't rush it. **These ideas are not particularly difficult, but they require you to work slowly and carefully.**
- Remember that Rob and I have extensive office hours and are available on Slack. If it seems like a simple error, we can sometimes offer a suggestion if you just share a screen shot.
- I try to write quiz questions that students who can do the review exercises will answer correctly and quickly (and that others will answer incorrectly and/or slowly).
- When you can't get your code to work, it's usually just a missing parenthesis, missing quotation mark, or something like that. It's not that you're making a huge mistake. Huamns can sitll mkae snese wehn tehre are tpyos, but not computers! Check your code for typos carefully. Run your script one line at a time, from top to bottom, to find mistakes. As examples, most mistakes are like the following:

```
b <- c("Male", "Female)  # missing the second " after "Female"
exp(23  # forgot to close a parentheses
log(10 base = 2)  # missing comma between arguments

a <- c(1, 2, 3)
mean(A)  # R is case-sensitive--there's an object "a", but no object "A"
mena(a)  # misspelled function name, it should be "mean," not "mena"
Mean(a)  # R is case-senstive--"Mean" and "mean" are different things.
```

Textbook and Calculator

Don't forget about your textbook and calculator (see the syllabus for the details). I think you should be able to find a copy for $40 or less. A rental works just fine. I recommend a hard/physical copy rather than an e-book.

Finishing Up

Make sure you have completed the entire assignment. Then complete the HW questionnaire, quiz, and letter on Canvas. These are due by Friday at 11:59pm. Please remind yourself of the standards of academic honesty as you complete the graded assignments.