A-State R User Group Spring 2023 – 18 April 2023 RMarkdown

- 1. RMarkdown is important for code sharing, reproducibility, troubleshooting, etc!
  - a. One nice cohesive document!
- 2. Have to install RMarkdown package before using it!
  - a. `install.packages("rmarkdown")`
- 3. File -> New file -> RMarkdown Document
  - a. There's a popup that... well... pops up
    - i. Name it, set the date, etc.
  - b. The structure of the file itself (differences between RMarkdown file and regular R script)
    - i. Title chunk --- YAML
      - 1. Zac adds `runtime: shiny` to this chunk
    - ii. Code "chunks"
      - 1. You can have titles that'll show up on the header list; you can also add #comments to help organize
      - 2. You can run a single chunk, multiple chunks, etc. using the in-line or the "Run" button at the top
      - Chunks start with ```{r} ```
    - iii. When you run a chunk, the output is placed in the console and in line... you can change those settings ("chunk output inline" vs. "chunk output in console")
  - c. "knitting"
    - There's a button to Knit, but also can do File -> Knit document or keyboard shortcut
    - ii. Spits out a word doc, pdf, html, whatever else you specify
    - iii. Interactive!
      - 1. Switch between graphs interactively on the html file
  - d. Source mode vs. visual mode
    - i. Easy formatting
    - ii. Source mode = code-style
    - iii. Visual mode = word document style
    - iv. LaTeX = easy way to stylize equations
  - e. Code chunk, text, graph, code chunk, etc. to accommodate and explain your code, interpretations of results, etc.
- 4. Exploring the cheat sheet
  - a. Modifiers for the chunk headers
    - i. E.g., 'echo = FALSE' is just the output, not an echo of the code
      - 1. Useful for presentations, manuscripts, when your advisor only wants to see the results and not all the code
    - ii. E.g., `Message = FALSE`, don't show any messages like when you're installing packages