Rmarkdown Workshop Info

Installation and Setup

You will need R and RStudio installed. If you want to generate PDF outputs, you also need a LaTeX installation. Best options are MiKTeX or TinyTeX. TinyTeX seems to be more widely recommended for what we are doing. It can be installed following instructions in the link below.

https://bookdown.org/yihui/rmarkdown-cookbook/install-latex.html

MiKTeX can be downloaded for Windows or Mac here (https://miktex.org/). If you have a mac, there are sometimes additional install steps that need to be done in your terminal. Follow these directions here (https://miktex.org/howto/modify-path).

Most of the other tools we will use live in the rmarkdown package. You don't need to explicitly install or load the package as it is already bundled with R Studio (as is Pandocs, used for creating PDF and .docx outputs).

To creat an R markdown file from RStudio, click $File > New \ File > R \ Markdown$. When prompted by the new file wizard, add a title and an author for the document and select an output format. Best to start with HTML as your output format (this can be changed at any time). Click OK. You will now be in your new .Rmd file.

Helpful Links

Rmarkdown Syntax

https://rstudio.com/wp-content/uploads/2015/02/rmarkdown-cheatsheet.pdf

https://rmarkdown.rstudio.com/authoring_basics.html

https://bookdown.org/yihui/rmarkdown/markdown-syntax.html

https://rpruim.github.io/s341/S19/from-class/MathinRmd.html

LaTex Syntax

http://www.docs.is.ed.ac.uk/skills/documents/3722/3722-2014.pdf

http://wch.github.io/latexsheet/

Writing with R markdown

References and Styles

Add citatons to reports and control citation format

https://bookdown.org/yihui/rmarkdown-cookbook/bibliography.html

GitHub repository of .csl files for different citation styles

https://github.com/citation-style-language/styles

Presentations and helpful references

 $https://oliviergimenez.github.io/intro_rmarkdown/\#1$

Additional Tools

${\bf Bookdown}$

R package for writing articles and books from Rmarkdown https://bookdown.org/

R Shiny

Make interactive documents

https://beta.rstudioconnect.com/content/2671/Combining-Shiny-R-Markdown.html

ReDOC

Makes documents 'reversable from MS word to .Rmd. Current release might be unstable https://noamross.github.io/redoc/