Tutorial 1: Getting Started

Nicholas Schwab

Introduction

We'll be using Rstudio for statistical computation in this course. We will log onto the Rstudio server which lives on a computer at HCC. You can install R and Rstudio on your personal computer, if you'd like, but that is in another video.

Log into the server

- 1. Navigate your browser to: http://hcc-rstudiosrv1.hcc.edu:8787/auth-sign-in
- 2. Use your @hcc.edu email and password to log in. If you forgot your password the help desk phone number is: 413.552.2075

example:

username: nschwab@hcc.edu

password: ******

Install tinytex()

Attempt 1

Copy and paste into the console: tinytex:::is_tinytex() and hit enter - If the word TRUE shows, you are done, and you can close this and move on. - If FALSE go to the next step.

Attempt 2

- Copy and paste into the console: tinytex::install_tinytex() and hit enter You will see a bunch of red script-let it run until it stops.
- At the top click Session > Restart R
- Copy and paste into the console: tinytex::is tinytex() and hit enter
 - If the word TRUE shows, you are done, and you can close this and move on.
 - If FALSE go to the next step

Attempt 3

- Copy and paste into the console: install.packages("tinytex") and hit enter You will see a bunch of red script-let it run until it stops
- At the top click Session > Restart R
- Copy and paste into the console: tinytex:::is tinytex() and hit enter
 - If the word TRUE shows, you are done, and you can close this and move on.

If FALSE go to the next step

Attempt 4

- Click the little red power button in the upper right hand corner to end the session.
- Then start a new session and type tinytex:::is_tinytex() if it says FALSE contact me.

Load the tutorial libraries:

Make sure you are running R 4.2.1 not R 4.1.1

Run this line of code in the console:

```
install.packages("remotes")
```

remotes::install_git("https://github.com/Nics-Github/MTH142Rtutorials")

Press 3 to update no packages.

A bunch of code will run, you shouldn't have to do this again.

Go to the session menu and click Restart R

Type library(MTH142Rtutorials) to load the tutorials

Tour of Rstudio

To help remember all of the things we need for this class, I've made a cheat sheet. Let's reference it to do the following:

- Where are the MTH142Rtutorials? How do I run a tutorial
- Make your first .Rmd
- Keep yourself organized
- Focus on the name of the file's spacing
- Renaming a file
- Downloading file from RStudio.
- Uploading a file to Rstudio.
- Copying and pasting plain text.
- Taking a screen shot

Console vs. Rmarkdown

- Scratch work can be done in the console
- Projects knit in markdown*

*Sometimes students get frustrated and complete the projects in a document with outputs from the console, that's ok you just lose a point. Totally worth it.

Grey Chunk vs white space

- Spacing in chunk
- Chunk titles
- Extra: Mosaic cheat sheets.

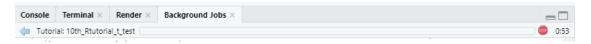
Assignment

- Make first knit .Rmd file.
- Delete all the default stuff below the YAML.
- Add a chunk to add some numbers together.
- Write a sentence about what you hope to learn or accomplish in this class.
- Save it as your_name_tut_1.Rmd
- Knit your markdown file as .html and post it to the 1st R tutorial forum.

Stop this tutorial when done

Don't forget to stop this tutorial. You can

• Use the little stop sign in the "background jobs" tab.



• Use the little stop sign in the "tutorial tab"

