Tutorial 1: Getting Started

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## 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”

