Precourse_Training by Ernest Fotsing, PhD

1. Installing R and the RStudio
In this course, we will use R within the RStudio IDE (Integrated Development Environment). RStudio is an interface to R and Python (and a number of other computer languages) that has numerous advantages over using R's built-in interface. The RStudio IDE provides loads of tools for an effective and well-organized R data workflow.

Install and open RStudio

1. If you do not have the most recent version of installed on your computer, **please visit this link** R: The R Project for Statistical Computing (r-project.org or https://cran.r-project.org/ or https://cran.r-project.org/src/base/R-4) and follow the directions to do so or this

You can directly, Download and install R Studio onto your computer by following this link https://www.rstudio.com/products/rstudio/download/

2. Please ensure that both (R and R studio) programs are properly installed on your computer.

3. Open RStudio and create a blank script file by pressing the keyboard shortcut CTRL+Shift+N (Mac: ⌘+Shift+N)

Required Pre-Course Work

1. Lesson 1: Values link: Lesson two: Values (shinyapps.io) https://smbc.shinyapps.io/L1-rValues/

2. Lesson 2: Objects link : Lesson three: Data objects (shinyapps.io) https://smbc.shinyapps.io/L1-rValues/L2-rObjects/

3. Lesson 3: Indexing link: Lesson four: Indexing (shinyapps.io) https://smbc.shinyapps.io/L3-indexing/#section-introduction

Some Other R Learning Resources

2. Those new to R should strongly consider working through "R for Beginners" by Emmanuel Paradis (https://cran.r-project.org/doc/contrib/Paradis-rdebuts_en.pdf). There are substantial other helpful materials from the CRAN site, under "documentation" (https://cran.r-project.org). Some of the most relevant are:

a. R intro manual from R Core Team: https://cran.r-project.org/doc/manuals/Rintro.pdf. Almost everything through Chapter 8 will be useful in the course. Like the Paradis book, this assumes you are working the R console, as opposed to in R Studio, which we'll be using the class, but this is fine. The R console is available as the "console" window in R studio.