

Assignment 1 - Setting up the computing environment and Introduction to R. Due September 7, 2021.

EPIB607 - Inferential Statistics^a

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R | RStudio | R Markdown | DataCamp

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Computing is an essential part of modern statistics. However, before doing any data analysis, we must first install the necessary tools. In this assignment you will first download R and RStudio and learn about what these tools are. Then you will signup for a free DataCamp account with your mail.mcgill.ca or mcgill.ca address. After this, you will be asked to complete a series of DataCamp courses that will guide you through some basic and some more advanced commands. You will then be introduced to R Markdown which is a tool for creating reproducible reports. All future assignments for this course must be submitted in R Markdown format.

1. Marking

Your progress and completion of these courses will be available to us automatically through the DataCamp website. **You do not need to hand anything in for this Assignment.** You will receive full credits for this assignment once we have seen that all tasks have been completed.

2. Install R and RStudio

Chapter 5 of this [free online book](#) will guide you through installing both R and RStudio. RStudio is a software application that facilitates how you interact with R.

3. Sign up for DataCamp

Sign up for a free DataCamp account at [this link](#). Note: you are required to sign up with a `@mail.mcgill.ca` or `@mcgill.ca` email address.

4. Required Courses to Complete

Once you have registered for DataCamp, you will see a series of courses that have been assigned. These are required to complete by September 7, 2021.

1. Introduction to R
2. Introduction to Importing Data in R
3. Exploratory Data Analysis in R
4. Introduction to the Tidyverse
5. Introduction to Data Visualization with ggplot2
6. Reporting with R Markdown

5. Optional Courses

The following courses are optional. You may find them helpful in strengthening your knowledge of R.

1. Working with Data in the Tidyverse
2. Data manipulation with dplyr
3. Intermediate Data Visualization with ggplot2
4. Joining Data with dplyr
5. Data Cleaning in R

5.1. Interactive R Learning Environment with Swirl (Optional). `swirl` is a software package for the R programming language that turns the R console into an interactive learning environment. Users receive immediate feedback as they are guided through self-paced lessons in data science and R programming. Students from previous years found this to be extremely helpful in their path to learning R. Follow [instructions on this page](#) for how to get started.