Programming with Data in R
The purpose of this course is to help graduate students acquire programming skills that make organizing, transforming, visualizing, and presenting data more efficient and reproducible as well as support data analysis workflows and model building. This is a lab based course and lectures are minimal. Class time will be spent practicing the art of programming with data under the instructor’s guidance. Students are encouraged to interject their own data and projects into the course. We will be using R and RStudio but the programming concepts and practices translate to other languages and environments like Python. Students are expected to have a basic familiarity with R and have completed at least the introductory statistics courses. Ideally students will have already had some experience in analyzing their own data. Students will be evaluated on their performance in the weekly lab activities. The labs are designed to be completed within the class time. Students are encouraged to integrate what they learn in the class into their data analysis activities outside of class. Topics include Basic R Commands and Concepts, Data Objects, Subsetting, Control Flow, Functions, Environments, Conditions, Scripts, Functional Programming in R, Debugging, Performance, Interfacing with other languages, Visualization, and formatting articles and presentations. Topics and depth of coverage will be adjusted to student need and interest.

Will be offered as PSYC 5170 in the Spring of 2020. I believe the course will be scheduled as a 3 hour lab on Monday afternoon.

If you have any questions feel free to ask me: adam.sheya@uconn.edu