Instructor Name: Steven Hernandez

Course Name: Introduction to Data Analysis and Graphics Using R

Course Description: (A brief description of the course content to be covered.)
This course is intended to provide first-time users the ability to manipulate, summarize, analyze, and display various types of data in R. Below is a general course outline – topics may vary based on time and interest.

Day 1: Introduction
• Using functions and assigning objects
• Interacting with external data
• Logical indexing and subsetting
• Recoding variables, modifying data

Day 2: Managing Data, Basic Data Analysis and Plotting
• Basic plotting functions
• Descriptive statistics
• t-tests, chi-squared tests, one-way ANOVA

Day 3: More Analysis and Ggplot
• Correlation and regression
• Multi-factor ANOVA
• ggplot2

Day 4: Advanced Models and Programming
• Logistic regression
• Mixed models
• Control flow
• User-written functions
• Simulations