# ECONOMICS 3818-010 Introduction to Statistics with Computer Applications Spring 2017 MWF, 11:00-11:50am, CLRE 207

Instructor: Matthew Ridge Butner

Office: Econ 307 Office Hours: Monday 1pm to 2pm and Wednesdays from 9am to 10am in Econ 307 Email: <u>matthew.butner@colorado.edu</u> Webpage: Desire to Learn & https://sites.google.com/site/matthewridgebutner/

"Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write." -Samuel S. Wilks (1950) misquoting H.G. Wells (1903)

## **Course Description**

Statistical literacy is one of the most valuable skills you can learn at University. This course will give you the theoretical foundation to study and understand statistics. The course has three components, roughly one for each midterm, (1) calculating probability of events and probability distributions (2) properties of random variables including sample statistics and (3) inference from confidence intervals and hypothesis testing. Before the cumulative final, we will briefly discuss the basics of regression analysis. During the semester we will do applications with the programming language R.

#### **Course Website:**

Lecture slides and homework assignments will be posted on the Desire to Learn course page. Data for computer applications will be hosted on my personal webpage.

#### **Prerequisites:**

Econ 2010 & 2020 and (Econ 1088 or Math 1081 or Math 1300 or Math 1310 or Appm 1350) This course will use algebra (summation notation) and calculus (integrals)

### **Textbook:**

Statistics for Economics: An Intuitive Approach, by Alan Caniglia. This text is out of print, but available at the campus book store and some used book retailers.

#### **Other Resources:**

Take advantage of office hours held by the TA and instructor. Online resources are plentiful. The economics department has a public tutoring lab where graduate students will help for free. The hours are available here: <u>http://www.colorado.edu/Economics/undergraduate/tutorial-lab.pdf</u>. Additionally, the economic department provides a list of graduate students available for private tutoring at