STATISTICAL METHODS I

STAT 3000/8005

Course Description:

Distributions, introduction to measures of central values and dispersion, population and sample, the normal distribution, inference: single population, inference: two populations, introduction to analysis of variance. Statistical packages on the computer will also be utilized in this course. **3 credits**

<u>Prerequisites</u>:

MATH 1310 or equivalent

Overview of content and purpose of the course:

To introduce students to statistical tests and procedures. To introduce the students to computing aspects of the software packages Minitab, SPSS, EXCEL and SAS.

Anticipated audience/demand:

Students from all areas who may desire some knowledge of statistical methodology.

Major topics:

- 1) Introduction and Categorical Data
- 2) Quantitative Data
- 3) Normal Distribution
- 4) Linear Regression
- **5**) Sampling Distribution
- 6) Confidence Intervals
- 7) Hypothesis Testing

Methods:

The method of instruction is presented primarily in lecture form. Graduate students in the course do projects not required of undergraduate students.

Textbook:

De Veaux, Richard D., Paul Velleman, and David E. Bock. *Intro Stats, 4th ed.* London: Pearson, 2013.