COMM 207 – Statistics II

Statistics involves the collection, organization, summarization and analysis of data. It is used to make inferences about a group of data when only a part of the data is observed. We all use data and statistics as well as the information generated by its use (or misuse!) in various facets of our daily lives. The analysis of data to understand and improve business processes forms a core activity required by University graduates in several fields.

This managerial statistics course endeavors to provide you with such understanding. Rather than merely adopting a "plugging into formulas" approach in this course - although statistical calculations are tremendously important - we want to be able to understand where data comes from, whether it can be trusted, and how one can effectively communicate key results to important stakeholders. Ultimately, good data with correct calculations leads to improved decision-making.

There are at least eight major objectives in this course:

- 1. To provide students with an understanding of the various quantitative techniques used in the analysis of data.
- 2. To illustrate how hypothesis testing is performed.
- 3. To showcase how Excel spreadsheets and statistical add-ins can be used to analyze data.
- 4. To describe the limitations of some statistical procedures.
- 5. To show how proper statistical analysis can lead to better decision-making.
- 6. To discuss the interpretation of statistical results and how they can be better communicated.
- 7. To eliminate the rampant skepticism of the importance and relevance of statistical methods.
- 8. To replace the fear and loathing generally (usually, frequently?) associated with managerial statistics with an appreciation for its value in understanding, analyzing and helping to solve real problems.

Textbook: <u>Statistics for Managers: Using Microsoft Excel</u> (Levine, Stephan, Krehbiel, Berenson and Bliss)