

Statistics 101, Summer 2012: Syllabus

1 Coordinates

Instructor: Alex Goldstein (*not* Dr. Goldstein, Professor Goldstein, or any other related title)

Contact Info: Email: alexlg@wharton.upenn.edu, Office: 4th floor of Huntsman

Office Hours: tba

Course Website: <http://www-stat.wharton.upenn.edu/~alexlg/stat101/>

2 Admin

A few guidelines:

- Mandatory: Do not engage in behavior that interferes with other students' learning.
- Strongly Suggested: Do not engage in behavior that interferes with your own learning.
- Do not cheat.

Course Materials:

- Textbook: Statistics for Business: Decision Making and Analysis by Robert A. Stine and Dean P. Foster. If you have access to a copy that's fine. There is no requirement that you buy the book. That said, there will be regular readings and occasional homework problems from the text.
- Software: R (<http://lib.stat.cmu.edu/R/CRAN/>) and JMP (installed on Huntsman machines)

Grading:

- There will be homework assignments and occasional quizzes: 30%. Assignments are due at the *beginning* of class.
- Midterm, in class June 5th: 30%
- Final, in class June 28th: 40%

3 Content

The goal of this class is to introduce ideas for making decisions using data when some measure of uncertainty is involved. Some concepts that aid our task:

- Visual and quantitative summaries of data
- Correlation, regression
- Probability & Random Variables
- Law of Large Numbers, Central Limit Theorem
- Confidence intervals, hypothesis tests