**Syllabus, Statistics 2, Summer 2009**

**Instructor:** Megan Goldman **Lectures:** M-F 10-11, 10 Evans
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**Website:** http://www.stat.berkeley.edu/users/mgoldman/Stat2.html
**Office Hours:** M 8:30-10 am, Thursday 1-2 pm in 393 Evans
**Text:** *Statistics*, 4th ed. by Freedman, Pisani, Purves.
**Grading:** Greater of: 20% homework, 30% midterm, 50% final
or 20% homework, 80% final
Grades are curved.
**Homework:** Generally due in discussion section on Tuesdays and Thursdays, but only one assignment due 1st week (Thurs), 4th week (Weds), and 8th week (Weds). There will be 13 assignments; your lowest 3 will be dropped. No partial credit for late homework. Solutions will be posted in the third floor hallway where your discussion is held.
**Exams:** The midterm will be on Friday at the end of 4th week; final on the Friday at the end of 8th week. If you are absolutely unable to make either of these dates, please let me know as soon as possible. Makeup exams will not be given.
**Calculator:** Nothing fancy required. It should be able to take a square root and raise a number to a given power. Statistical calculators are not necessary.
**Comments:** In order to learn the most from this class, skim the relevant reading once before lecture and then read it more thoroughly as you do the homework. The text emphasizes intuition so you should think about why things are done the way they are as you study the material. Mastering the formulas and techniques will not be enough to excel in this class, you also need to understand the ideas behind the formulas and when it is not appropriate to use them.

**Schedule: (TENTATIVE, come to lectures for updates)**

| Week of | Topics (M/T/W/T/F) | Chapters |
|---|---|---|
| 6/22 | Intro,Design of Experiments, | 1, 2 |
| | Histograms, Average, Median, and SD | 3, 4, 5 |
| 6/29 | Normal Curve | 5 |
| | Correlation | 8,9 |
| 7/6 | Regression | 10,11,12 |
| 7/13 | Probability | 13, 14, 15 |
| | Review, Midterm | |
| 7/20 | Law of Averages, Expected Value, Std. Error | 16, 17 |
| | Normal Approximation | 18 |
| 7/27 | Surveys, Chance Error | 19, 20 |
| | Confidence Intervals, Accuracy of Averages | 21, 23 |
| 8/3 | Hypothesis Testing | 26, 27 |
| 8/10 | Chi-squared, Hypothesis Testing Caveats | 28, 29 |
| | Review, Final | |