### STAT202 - FALL 2006

<table>
<thead>
<tr>
<th>Section</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Instructor</td>
<td>Ali Ghodsi</td>
<td>Ali Ghodsi</td>
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<tr>
<td>Lecture Time/Room</td>
<td>11:30-12:20 MWF/MC 1085</td>
<td>9:30-10:20 MWF/MC 4021</td>
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<tr>
<td>Tutorial Time/Room</td>
<td>11:30-12:20 T/MC 1085</td>
<td>10:30-11:20 T/MC 1085</td>
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<tr>
<td>Office Hour/Room</td>
<td>10:30-11:30 MW/MC 6081G</td>
<td>10:30-11:30 MW/MC 6081G</td>
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**Text:**

*Statistics for the Life Sciences* (3rd Edition), by Samuels and Witmer

**Evaluation:**

10% assignments + 30% quizzes + 60% final exam

**Quiz Date:**

Tuesday Oct. 17
Tuesday Nov. 14

**Assignment:**

There will be eight weekly assignments starting from the second week. No assignments will be handed out on the weeks of Oct. 9 and Nov. 6 because of the following quizzes. All assignments will be handed out on Wednesdays and collected on the following Wednesdays.

**Note:**

- Quizzes will be written in the tutorial room at the tutorial times for each section.
- A passing mark must be achieved on the final exam in order to receive a pass on the course.
- For the final exam two one-sided 8 $\frac{1}{2}$ × 11 aid sheets will be permitted. Non-programmable calculators are allowed.

**Note for Students with Disabilities:**

The Office for Persons with Disabilities (OPD), located in Needles hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.
Course Content:

This course will cover the following three topics which are mostly included in the textbook. I might also cover some material that is not discussed in the textbook. Below is a detailed outline of the topics that will be covered in this course.

- Descriptions of Data: Graphical Techniques and Numerical Summaries
  - (Relative) frequency histogram, Stem-and-leaf diagram, Mean and median, Sample standard deviation (S.D.) and interquartile range (IQR), (Modified) boxplot, Coefficient of variation

- Mathematical Tools: Probability and Distribution
  - Frequency definition of probability, Probability tree, Random sample (sampling), Discrete random variable, Binomial distribution, Continuous random variable, Normal distribution
  - Sampling variability, Sampling distribution of sample proportions, Sampling distribution of sample means, Central Limit Theorem, The normal approximation to the binomial distribution (with continuity correction)

- Statistical Inference: Confidence Interval and Hypothesis Test
  - Confidence intervals for a population mean and population proportion.
  - Confidence intervals for the difference in population means and population proportions.
  - Hypothesis test for a difference in population means.
  - Confidence intervals and hypothesis tests from paired data.
  - Analysis of categorical data. Tests of proportions, chi-square test.

Note:

All dates and topics are approximate and subject to change.