Syllabus

Statistics 350B  Statistical Methods II

Prerequisites:  Stat 350A or consent of instructor

Course Web Page:  http://rohan.sdsu.edu/~jjfan/sta350b

Lectures:  MWF 12:00 - 12:50 pm, GMCS 325

Instructor:  Professor Juanjuan Fan
Office:  GMCS 519
E-mail:  jjfan@sciences.sdsu.edu
Office Hours:  M 3-4pm, F 11a-12p, or by appointment

Required Text:  An Introduction to Statistical Methods and Data Analysis, 5th Ed. by RL Ott and M Longnecker

Homework: Homework will be assigned on the course web page each Wednesday and will be due the following Wednesday at the beginning of the lecture. You are encouraged to discuss homework problems with other students, but you should write up your solutions independently. You are welcome to ask me if you have questions.

Homework must be handed in by the beginning of lecture on the due date. **No late homework will be accepted.** If you cannot be in class when an assignment is due, please be sure to leave it in my departmental mailbox or slide it under my door by the due time. One homework grade will be dropped - this should be used to cover unforeseen emergencies.

Exams: There will be 2 midterm exams and one final exam. The midterms will be held in class on the following dates:

- Friday, March 4;
- Friday, April 15.

The final will be given on

- Monday, May 16, at 10:30a - 12:30p.

The exams will be closed book/notes and will be cumulative. Make-up of missed exams will be allowed only as a result of a University-excused absence.
Project: There will be a data analysis project. The objective is for you to practice the methods from this class in a real data setting and to learn to present the results of your statistical analysis. The project will be assigned at mid-semester.

Computing: Most homework assignments will have problems that require use of Minitab. Computer output required for homework must be properly edited, labeled, and neatly presented.

Minitab is installed in GMCS 422 and 405. You can also buy or rent your own copy at www.minitab.com. The minitab commands needed for homework assignments will be posted on the course web page.

Grading: The grade for the class will be based on the following percentages:

- Homework: 15%
- Two midterms: 40% (20% each midterm)
- Project: 15%
- Final: 30%

Tentative Schedule

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<th>Week</th>
<th>Topic(s)</th>
<th>Reading from Text</th>
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<td>1-2</td>
<td>Simple linear regression</td>
<td>Sections 11.1-11.4, 11.7</td>
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<td>3-5</td>
<td>Multiple regression</td>
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<td>6</td>
<td>Linear regression: model diagnostics</td>
<td>Sections 11.5, 13.4</td>
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<td>7-8</td>
<td>Analysis of Variance</td>
<td>Chapter 8</td>
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<td>9-11</td>
<td>RCB, Latin square &amp; Factorial experiments</td>
<td>Chapters 14-15</td>
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<tr>
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<td>Analysis of Covariance</td>
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