MATH 3070: Applied Statistics, Spring 2010

Time/Place: MWF 9:40am - 10:30am BEH S 110
Instructor: Liang Zhang, JWB129, 581-5273
Email: lzhang@math.utah.edu
Web site: http://www.math.utah.edu/~lzhang/3070/
Office Hours: 3:00pm-4:00pm MWF & by appointment

Texts:
Probability and Statistics for Science, Engineering, and Finance
by Walter A. Rosenkrantz, CRC Press, 2009
Learning SAS in the Computer Lab
by Rebecca Elliot, 3nd ed., Duxbury Press, 2009

Grading:
Final grades will be based on two midterms scoring 25%, best nine
of eleven quizzes 15%, final 30%, homework 20% and lab 10%.

Midterms:
There will be two full hour midterm exams on Monday February
22 and Monday April 5. Questions will be similar to homework
problems.

Quizzes:
There will be a 10 minute quiz each week on Wednesday (except
the midterm weeks). For each quiz you will be responsible for the
material covered from the day of the previous quiz/midterm through
the class meeting preceding the quiz.

Final Exam:
The final exam will be on Friday, April 30, from 8:00am to 10:00am.
Half of the final will be devoted to material covered after the second
midterm exam. The other half will be comprehensive. Students
must pass the final to pass the course.

Homework: There will be homework problems each day. The prob-
lems and the due dates will be announced in class.

Lab:
Students will meet in the computer lab once a week for two hours.
Students must pass the lab to pass the course. Most students man-
age to easily complete the lab assignments during the lab. Or stu-
Students may access the computers at other times from the Mathematics Center.

Grading Scale:

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<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100-93</td>
<td>A</td>
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<tr>
<td>92-90</td>
<td>A-</td>
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<td>69-67</td>
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<tr>
<td>0-59</td>
<td>E</td>
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Contents:

This is the first course in a sequence of two that offers a comprehensive introduction to the concepts of probability and statistics. We begin by quickly presenting some ways to organize and present data used in descriptive statistics. Using sample data to make estimates about a population from which the sample is drawn depends on the notions from probability. We consider basic laws of probability, random variables (one- and two-dimensional), common distributions, sample statistics and the Central Limit Theorem. Finally we develop the basic techniques of inferential statistics, point estimates, confidence intervals and hypothesis testing.

Tutoring:

Free tutoring is available in the T. Benny Bushing Mathematics Center, located between LCB and JWB. The regular hours during spring is M-Th 8:00am - 8:00pm, Fri 8:00am - 4:00pm.

Withdrawals:

Last day to drop a class is Jan.20. Until Mar.5 you can withdraw from the class with no approval at all. After that date you must petition your dean’s office to be allowed to withdraw.

ADA:

The Americans with Disability Act requires that reasonable accommodations be provided for students with cognitive, systemic, learning and psychiatric disabilities. Please contact me at the beginning of the quarter to discuss any such accommodations you may require for this course.