Stat 400 Syllabus, Sections 0111, 0112, 0121, 0122, 0131, 0132.

Fall 2011

Time and place: MWF.....1:00pm- 1:50pm (ARM 0131)

Time and place of discussion sessions:
0111 - Tu..... 8:00am- 9:15am (MTH 0401) Dis
0112 - Tu..... 8:00am- 9:15am (MTH 0305) Dis
0121 - Tu..... 9:30am-10:45am (MTH 0401) Dis
0122 - Tu..... 9:30am-10:45am (MTH 0405) Dis
0131 - Tu.....11:00am-12:15pm (MTH B0427) Dis
0132 - Tu.....11:00am-12:15pm (CHM 0124) Dis

Textbook: Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Custom Edition, ISBN: 978-1-1-3327062-1.

Instructor: Prof. L. Koralov

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Office hours: Monday, Wednesday and Friday, 1:50pm - 2:50pm. (It is best to make an appointment via e-mail or in person immediately after the lecture.)

Grading policy and exam dates: Homework will be assigned, collected by the TA's and graded. There will be approximately ten homeworks assigned during the semester of which the best eight will count towards the grade. Two midterm exams will be given. Additionally, quizzes may be given by the TAs. The dates for the midterms are October 3, Monday and November 2, Wednesday, time 1:00pm - 1:50pm. The date for the final is December 16, Friday, time - 1:30pm-3:30pm. The combination of homeworks and quizzes will contribute 250 points to the final grade, the midterms will contribute 400 points and the final exam will contribute 350 points for a total of 1000 points.

During the exams, the students are expected to apply the ideas they learned to problems that may be significantly different from the examples seen in class and from the homework problems.

Attendance policy: The students are responsible for all the material covered in class. If a student misses an exam or quiz due to circumstances beyond the students' control, the student must supply appropriate documentation in which case special arrangements will be made.

Topics to be covered: The σ-algebra of events; probability; conditional probability; Bayes theorem; independence.

Discrete random variables; basic discrete distributions (binomial, hypergeometric, Poisson, negative binomial).

Continuous random variables; probability density function; basic continuous distributions; the central limit theorem.

Random vectors; joint, marginal and conditional distributions; the correlation coefficient.

Data and what they tell us about a model; point and interval estimation; margin of errors. Confidence intervals. Testing statistical hypothesis.

Other: You should be familiar with the University's policies on Academic Integrity, including the Honor Pledge. In particular, during quizzes and exams you should work on the problems on your own. You may work collaboratively on those of the homework problems which you have tried to solve on your own for at least several hours.

If your religion dictates that you cannot take an exam or hand in assigned work on a particular date, then contact me at the beginning of the semester to discuss alternatives. You are responsible for making these arrangements at the beginning of the semester.

If you have some disability related to testing under the usual timed, in-class conditions, you may contact the office of Disabled Students Services (DSS). If they assess you as meriting private conditions and/or extra time, then you may arrange to take your tests at DSS, with extra time as they indicate. You must arrange this well in advance of a test.