15 STAT 363-001 (#405403)
Probability & Statistics III
Spring 2012

Mondays/Wednesdays/Fridays, 12:00 pm – 12:50 pm, Room 3230, RECCENTR

Instructor: *Xia Wang*
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Office Hours: *Mondays/Wednesdays 1:00 pm -2:45 pm or by appointment*

Course Description: More linear regression; multiple linear regression; analysis of variance; experimental design; nonparametric statistics.

Bok area: QR (Quantitative Reasoning)

Prerequisites: 15 Stat 362 with at least C-.

Course Webpage: All course related information are posted on UC Blackboard (http://blackboard.uc.edu), including course syllabus, reading assignments, lecture notes, handouts, homework assignments, codes, announcements, etc. **Visit it frequently!!!**

Text: *Probability & Statistics for Engineers & Scientist, 9th edition, by Walpole, Myers, Myers, Ye.*

     The many data sets associated with the exercises are available for download from the website http://www.pearsonhighered.com/datasets.

Examination:

     Midterm 1: Wednesday **April 18**, 12:00 pm- 12:50 pm.

     Midterm 2: Monday **May 14**, 12:00 pm-12:50 pm.

     Final Exam: Tuesday **June 5**, 12:00 pm – 2:00 pm.

- There will be 2 midterm exams during the quarter (Midterm1 and Midterm 2) and the final examination (Final Exam).
- The exam dates for each exam are as specified in the above tentative schedule or as announced if there is any change (updates will be posted on the Blackboard accordingly). Exams will cover materials from **textbook, lectures and handouts.**
- All 3 examinations are **close-book**. You are allowed <u>one</u> sheet of notes (8.5 x 11 inches) with <u>formulas only</u> for each exam. There should be no worked out examples on the formula sheet.
- A calculator (no cell phone calculators or PDAs) may be brought to exams
- There will be NO SCHEDULED MAKE-UP EXAMS. When there are unavoidable circumstances, the student must contact the instructor before the exam date. DOCUMENTATION IS REQUIRED. For medical circumstances, the student must contact the instructor with a written medical excuse document signed by a qualified professional.

Chapters Covered on Midterm 1
Chapter 11: 11.1-11.8, 11.10
Chapter 12: 12.1-2, 12.4-12.5

Chapters Covered on Midterm 2
Chapter 12: a few questions from Midterm 1
Chapter 12: 12.6, 12.8-12.11
Chapter 13: 13.1-13.3

Chapters Covered on Final Exam
Chapter 12: one question from Midterm 1 or Midterm 2
Chapter 13: one question from Midterm 2
Chapter 13: 13.4, 13.6, 13.9
Chapter 14: 14.1-14.3
Chapter 16: 16.1-16.5

Homework:

HW#1 due on **April 4**	HW#5 due on **May 9**
HW#2 due on **April 11**	HW#6 due on **May 23**
HW#3 due on **April 25**	HW#7 due on **May 30**
HW#4 due on **May 2**	

- Homework will be assigned one week before its due date;
- Prepare your homework with problems in order, on __one side__ of standard 8½×11 sheets, stapled in the upper left-hand corner;
- Electronically handed-in homework is __not__ accepted.
- Homework assignments will be due as specified in the above tentative schedule or as announced if there is any change (updates will be posted on UC Blackboard accordingly);
- Homework assignments must be handed in at the beginning of the class on the due date. Do not slide them under the instructor/grader's office door or drop them off in the instructor/grader's mailbox. THEY WILL NOT BE ACCEPTED;
- No late hand-in. If extenuating circumstances exist, you must speak directly to the instructor.

Tentative Schedule (as of March 24, 2012):

Week Beginning:	Topic	Reading Assignment
Mar. 26	Simple Linear Regression	Chapter 11: 11.1-11.5
Apr. 2	Simple Linear Regression (continued)	Chapter 11: 11.6-11.8
Apr. 9	Simple Linear Regression (continued) Multiple Linear Regression	Chapter 11: 11.10 Chapter 12: 12.1-12.2, 12.4-12.5
Apr. 16	Multiple Linear Regression (continued)	Chapter 12: 12.6, 12.8
Apr. 23	Multiple Linear Regression (continued)	Chapter 12: 12.9-12.11
Apr. 30	One-factor Experiments	Chapter 13: 13.1-13.3
May 7	One-factor Experiments (continued)	Chapter 13: 13.4, 13.6
May 14	One-factor Experiments (continued) Factorial Experiments	Chapter 13: 13.9 Chapter 14: 14.1-14.3
May 21	Nonparametric Statistics	Chapter 16: 16.1-16.3
May 28	Nonparametric Statistics (continued)	Chapter 16: 16.4-16.5

Final Course Grade:

The upper limits for contributions to the final grade are HW (15%), **in-class practice problems** (10%), Midterm 1 (20%), Midterm 2 (20%) and Final Exam (35%).

The traditional letter grades will be used: 90% and up = A(or A-), 80-89% = B(+/-), 70-79% = C(+/-), 60-69% = D(+/-), and Below 60% = F.

Students should keep all returned homework and exams until they have received their final grade. It is the student's responsibility to get the homework and the exams from the instructor.

Electronic Communication

Course announcements and materials are posted on Blackboard through the quarter. Beyond class and office hours, the best way to contact the instructor is by email (xia.wang@uc.edu).

The course email correspondence must be done via UC email accounts. The instructor cannot send email to any other account (i.e. gmail, hotmail, yahoo, etc.)

Classroom Etiquette:

Our goal is to have a classroom atmosphere that allows the class to learn the material without distractions. The following behaviors will help us achieve this:

- Please turn off your cell phones or set it to vibration before coming to class.
- Please arrive in class on time.
- Please do not disrupt others during class.
- Please do not leave class early unless you have to. If you plan to leave early, sit near the door so as to disturb as few people as possible.

Academic Integrity Policy:

The University Rules, including the Student Code of Conduct, and other documented policies of the department, college, and university related to academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

Special Needs Policy:

If you have any special needs related to your participation in this course, including identified visual impairment, hearing impairment, physical impairment, communication disorder, and/or specific learning disability that may influence your performance in this course, you should meet with the instructor to arrange for reasonable provisions to ensure an equitable opportunity to meet all the requirements of this course. At the discretion of the instructor, some accommodations may require prior approval by Disability Services.

(This syllabus is subject to changes.)