STATS 100C: LINEAR MODELS

Syllabus (Spring 2009)

Instructor: Hongquan Xu <hqxu@stat.ucla.edu>
Office Hour: MWF 1-1:50pm at MS 8955
Phone: (310)206-0035
Lecture: MWF 2-2:50pm MS 5128
Discussion: R 2-2:50pm MS 5128
TA:

Course Homepage: http://moodle.stat.ucla.edu/
Prerequisite: Statistics 100B (and **linear algebra** such as Math 33A).

Textbook (required) *Introduction to Regression Modeling*, by B. Abraham and J. Ledolter, 2006, ISBN 9780534420758.

Topics: Theory of linear models, with emphasis on matrix approach to linear regression. Topics include model fitting, extra sums of squares principle, testing general linear hypothesis in regression, inference procedures, model checking and model selection.

Software
We'll use R, free open-source statistical software that is quite powerful and flexible. You are strongly encouraged to download onto your own computer. You can download R at
> http://cran.stat.ucla.edu

Grading
Your grade will be based on
> a) Weekly Homework (10%): **No late homework.**
> b) Two Midterms (20%+20%) :
>> Midterm exam 1: **Monday, April 20, 2009**
>> Midterm exam 2: **Monday, May 11, 2009**
> c) Final (50%): **Monday, June 8, 2009**, 11:30am-2:30pm

All exams are **closed-book** exams and **no notes** are allowed. Formulas and tables will be provided if necessary.

Class attendance is required and important for you to understand the materials, especially the topics not from the textbooks. The exams will include everything taught in lectures and discussion sessions.