## STATISTICS 201, Fall 2013 STATISTICAL METHODS FOR DATA ANALYSIS I

**Lecture:** Mon, Wed, 2:00 – 3:20pm, 1200 DBH **Discussion:** Wed, 4:00 – 4:50pm, 102 ICF

**Instructor:** Professor Jessica Utts, Department of Statistics

Office location: 2038 Donald Bren Hall

Email: jutts@uci.edu; Phone: (949) 824-0649 (but email is better)

**Office hours:** Tues 4-5:30 and Wed 5:00-6:00, or by appointment. (No office hours Oct 1 or 16)

**Textbook:** Applied Linear Regression Models, 4<sup>th</sup> Edition by Michael H Kutner, Christopher J.

Nachtsheim and John Neter, McGraw-Hill

The textbook is on 2-hour reserve in the Ayala Science Library.

Website: http://www.ics.uci.edu/~jutts/201 The website has general information and will be updated regularly with homework assignments and other useful information.

Course Goals and material to be covered: The goal of this course is to enhance your data analysis skills as well as your understanding of statistics. Two common areas of statistical analysis will be covered: Regression and Analysis of variance (ANOVA), with most of the time spent on regression. Emphasis is on applications and understanding, not on theory. Regression is covered in the textbook but ANOVA is not. Supplemental material will be provided for ANOVA toward the end of the quarter.

**Prerequisite:** Knowledge of basic statistics at the level of Statistics 7.

Computing: We are using *free* statistical software called R. To get you acquainted with R we will start with a menu-driven add-on called R Commander (also free). You can download both of these onto your own personal computer (PC and Mac). Instruction will be provided. These are available in the ICS computer labs as well, but to use them there you need to set up an account with ICS. Instructions for doing so are provided at this link: <a href="http://www.ics.uci.edu/~lab/students/acct\_activate.php">http://www.ics.uci.edu/~lab/students/acct\_activate.php</a> (also linked to the course webpage). Information on R and R Commander will be on the course webpage.

**Discussion Sections:** Wed discussion sections will not always be held, and will be used for a variety of purposes including computer instruction, review, and possibly, presentation of new material if we get behind schedule. Consult the detailed schedule on the course webpage for updated information.

## **Homework (30%):**

Homework will be assigned at each lecture and is due weekly, by 6pm on *Wednesday* of the week after it is assigned. Assignments and due dates are given on the webpage.

Midterm Exam (30%):

Tentative date is Wed, October 30

**Final Exam (40%):** 

Fri, Dec 13, 1:30 – 3:30pm