STATISTICS 110 Fall 2015
STATISTICAL METHODS FOR DATA ANALYSIS I

Lecture: Mon, Wed, 12:30 – 1:50; 174 ICS
Discussion: Fri, 11:00 – 11:50 and 12:00 – 12:50 (140 Social Science Lab)
Instructor: Professor Jessica Utts, Department of Statistics
Office location: 2038 Donald Bren Hall; office hours in 2032 Bren
Email: jutts@uci.edu; Phone: (949) 824-0649 (but email is better)

Office hours: Mon/Wed 2:00 – 3:30pm. (Occasionally changed, you will be notified by email.)
Office hours also available by appointment.

TA: Brandon Berman, bermanb@uci.edu
Office hours: Tues 2:30 – 4:00, Fri 1:30 – 3:00 in 2032 Bren Hall.

Reader: Micah Jackson, gmjackso@uci.edu
Office hour: Mon, 4:00 – 5:00, for questions about homework grading only. No grade changes.


Website: http://www.ics.uci.edu/~jutts/110 The website has general information and will be updated regularly with homework assignments and other useful information.

Textbook website: http://bcs.whfreeman.com/stat2, has data sets (with no access code needed), student solutions manual, R manuals; access code is in a card in the back of your textbook. If you purchased a used book you will have access to the data sets but not the other materials, which are optional, not required.

Course Goals and material to be covered: We will cover Chapters 0 to 4, and parts of Chapters 5 to 8. The goal of this course is to enhance your data analysis skills and your understanding of statistics. Two common areas of statistical analysis will be covered: Regression and Analysis of variance (ANOVA), with more time spent on regression. Emphasis is on applications and understanding, not on theory.

Prerequisite: Knowledge of basic statistics at the level of Statistics 7. This is a necessary prerequisite, and I will assume that you are strongly familiar with the material from Statistics 7.

Computing: We are using free statistical software called R, and a free add-on called R Studio. You can download these onto your own computer (PC and Mac). Instruction will be provided in class and/or in discussion sections. The programs 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: http://www.ics.uci.edu/~lab/students/acct_activate.php (also linked to the course webpage). More information on using R and R Studio are on the course webpage.
**Discussion Sections:** Friday discussion sections 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, EXAMS AND GRADING:**

**Your individual homework and exam ID code:** You have each been assigned a unique homework/exam ID code, which is a number from 1 to 110. The list of codes is linked to the course webpage, and is accessible here (listed using the first 6 digits of your UCI Student ID number). Please write your ID code and your name in the upper right corner of your homework when you turn it in. Homework will be returned in class, using your ID code.

**Homework (30%):** Homework will be assigned on Wed and will normally be due the following Wed in class, with two exceptions (due to midterm and Veterans’ Day holiday) as noted on the daily calendar on the webpage. Assignments and due dates are given on the course webpage. Homework can be turned in during class, or in the slot marked Stat 110 in the alcove across the hall from 2202 DBH by 1:50 pm on the due date.

**Midterm Exam (30%):** Given Wed, Oct 28, covering material through Friday, Oct 23.

**Final Exam (40%):** Mon, Dec 7, 1:30 – 3:30pm

**POLICIES:**

**Homework Honesty Policy:** Although you are encouraged to study with other students and to discuss homework with them, you are each expected to do your own work, including your own computing work and R code. If you are assigned a problem that has an answer in the student solutions manual or the back of the book, you are expected to write the solution in your own words, not copy it from the book. And if solutions exist on a website somewhere it is a violation of the honesty policy to copy them. Violations of these expectations will result in forwarding your name for disciplinary action.

**Policy on changing homework and midterm grades:** Except for administrative errors (such as adding up points incorrectly), no homework or midterm grades will be changed during the quarter. Instead, at the end of the quarter (by the end of the day of the final exam) you will be given an opportunity to turn in any grade disputes with an explanation in writing. A cover sheet will be provided for you to show the total number of points in dispute. After calculating grades, I will see if that number of points would change your letter grade (including +/–). If the answer is yes, I will carefully consider your rationale. For this reason, it is important that you pick up your graded homework and exams and retain them until the end of the quarter.

**What to bring (and not bring) to exams:** The midterm and final exam will both be open notes. You may bring your notes, but not your book. (I would have open book exams, but not all students have their own copy of the book.) You also will need a basic calculator. You may not use the calculator on your phone or any other device that connects to the internet.