

## STATISTICS 7, WINTER 2013

**Lecture:** MWF, 3:00 – 3:50, 1100 Donald Bren Hall  
**Instructor:** Professor Jessica Utts, 2212 Bren Hall, 929-824-0649, jutts@uci.edu  
**Office Hours:** Mon, Wed, Fri: 1:30 – 2:30 pm or by appointment. (Do not hesitate to email for an appointment!)

**Discussions:** Five of the discussions will be “hands on” activities and the remaining 5 will be question/answer and review. You are required to attend at least 3 of the 5 hands-on discussions for full credit. See section on Grading for more information. You must attend the discussion for which you are enrolled. All discussions are in 103 SSTR.

**TAs:** You may attend office hours with either TA (2032 Bren Hall). TAs’ email, office hours, discussion sections:

- Brandon Berman, bermanb@uci.edu; Office hours Mon/Wed 4:00 – 5:30, Discussions 1 (9am) and 2 (10am)
- Yan He, yhe@uci.edu; Office hours Tues/Thurs 2:00 – 3:30, Discussions 3 (noon) and 4 (1pm)

**Textbook:** *Mind On Statistics, 4<sup>th</sup> edition* by Jessica Utts and Robert Heckard. See website for options.

**Coverage:** We will cover most of the sections in Chapters 1 to 13 and 17. You are responsible for what is covered in class, whether or not it is in the book. Almost all of the material covered in class is in the book and exceptions are noted in the daily calendar. You are not responsible for material in the book that isn’t covered in class, except for sections you are explicitly asked to read on your own. (These are listed on the website in the daily calendar.)

**Web Site:** <http://www.ics.uci.edu/~jutts/7> includes daily calendar (with sections covered, homework assignments with due dates, discussion topics), slides from class lectures, computer resources, practice exams, homework solutions, links to related sites, etc. Grades posted as they become available.

**Announcements** are made most days in class. You are responsible for them, even if you are not in class. Occasionally announcements will be sent by email, so make sure you check your @uci email.

**Computing:** We will use free software called “R Commander.” You will be instructed in its use.

**Grading, Exams, Homework, Clickers and Discussion Sections (see next page for more details):**

**Exams:** Two midterms, each worth **25%**. Dates are **Fri Feb 1** and **Fri Mar 1**. You may bring one sheet of notes to midterm 1 (front and back), two sheets to midterm 2, and four sheets to the final exam.

**Final Exam:** **Mon, Mar 18** from 4 to 6 pm. Final exam is comprehensive but more focus on material covered after the second midterm exam. The final exam counts for **32%** of your grade.

**Homework:** Homework is worth **7%** of your grade. See the next page for details.

**iClickers:** Clicker questions are worth **8%** of your grade, with **1%** for **each of the 8 “assignment weeks.”** Optionally, you may substitute online quizzes. See the next page for details.

**Discussions:** There will be “hands-on” activities in 5 of the 10 Friday discussion sections. (The remainder will be review and question/answer.) You are required to participate in *3 out of the 5* and will receive 1 point for each, up to a maximum of 3 points, or **3%** of your grade. See next page for details.

**Grade Disputes** will not be considered until the end of the quarter. A cover sheet will be provided for you to write the total number of points in question and your rationale. If the total points in question will *change* your letter grade (including +/-), your rationale will be considered. Details provided later.

### **Classroom Etiquette:**

1. I make every effort to start and end on time. Please respect the 50 minutes of class time; do not pack up early. If you know you have to leave early, please sit near the doors.
2. If you are bored and want to work on something else, feel free to do so as long as you don’t disturb others. Please do not talk to others during class. It disturbs those around you.
3. Please silence phones and other electronics.

## GRADES: EXAMS, HOMEWORK, CLICKERS, ONLINE QUIZZES AND DISCUSSIONS

<b>Grading summary:</b>	Midterm 1:	25%
	Midterm 2:	25%
	Final exam:	32%
	Homework:	7%
	Clicker/Quizzes:	8%
	Discussion sections:	3%
	TOTAL:	100%

“Assignment weeks” are sets of 3 lectures. Actual days of the week making up an assignment week change because of Monday holidays and because of days used for review and midterm exams. See the daily calendar on the class webpage for specific dates. There are 8 assignment weeks. Each one has homework, clicker and quiz points.

### Homework (7%):

- A few problems will be assigned with each lecture, usually with a total of 10 per week. All 3 assignments for an “assignment week” are due the day of the next regular lecture. For example, if an assignment week is Wed, Fri, Mon, homework is due on Wednesday. Due dates are listed on the website daily calendar. You can hand homework in during class, or take it to a “drop box” across the hall from Room 2022 Bren Hall **by 6pm on the due date**. *Late homework will not be accepted because keys are posted right after the homework is due.*
- **You will receive NO credit unless you follow these rules:**
  - On the upper right of each assignment write: *Name, Lecture and Discussion Section number (1 to 4) Student ID# (or last 6 digits if you don't want to display the full ID#).*
  - Use standard size paper (white or color), either 8.5 × 11 inch printer paper or standard notebook paper.
  - If you use notebook paper, remove the jagged edges. (They get caught on other pages.)
  - You may hand write or type your homework, but if it is *not legible* you will not receive credit.
  - Do the problems *in the order they are assigned*, even if that is not the order they appear in the book.
- Each assignment will be graded on the basis of 10 points. The lowest of the 8 scores will be dropped. The remaining 7 scores will each be worth **1%**, for a total of **7%** of your grade.

### Clickers and Online quizzes (8%; note that the lowest week is *not* dropped for these):

- For each “assignment week” there will be 5 clicker questions for credit. Questions are given intermittently during the lectures. If more than 5 questions are given in an assignment week, 5 will be randomly selected to count for credit. For each of the 5 questions you *answer* you will receive 1 point, and for each *correct* answer you will receive an additional point, for a total possible of 10 points per assignment week.
- If you prefer, for each “assignment week” you can substitute an online quiz for the clicker points. The quizzes consist of 5 multiple choice questions, randomly selected for you (individually) from a larger set. You will receive 2 points for each correct answer and 0 points for each incorrect answer, for a total possible of 10 points. Quizzes begin at 4pm on the day of the last lecture of the assignment week, and must be completed by 3pm on the day of the next lecture. Quizzes are timed and you have a maximum of 20 minutes to complete them. If you take more than 20 minutes you will receive only partial credit. You have only one attempt for each quiz. You will receive an email (to your uci address) when quizzes are ready.
- If you complete both the clicker questions and the online quiz, the higher of your two scores for that assignment week will be counted.
- Your clicker/quiz score for each of the 8 assignment weeks counts as **1%** of your total grade, so the combined total for clicker and/or online quizzes is **8%** of your grade. No weeks are dropped.

### Discussion Sections (3%):

- There are 10 discussion dates. Review and/or question and answer on Jan 18; Feb 1, 22; Mar 1, 15.
- In the remaining 5 discussion sections we will do hands-on projects that give you experience in various areas of statistical practice. You are required to participate in **3 out of the 5**. You will receive **1 point for each** of these, for a total possible maximum of **3 points**, or **3%** of your grade.
- If you participate in more than 3 of the 5 hands-on discussion sections, I will consider your extra participation if your grade is borderline between two possible grades. Also, exam problems may ask about what was done in discussion sections, so you should attend them all if possible.

## Course Goals and General Education Learning Outcomes

Statistics is not mathematics, although we sometimes use mathematics as a tool. In this course I hope you will learn that some knowledge of statistical ideas is useful in your daily life. Although you will learn some formulas, we will use computer software for most of the computations and the emphasis in the course will be on understanding the concepts. It is very important to remain current with the material because it is cumulative. One of the major goals of the course is for you to understand the use of statistics in daily life and in your academic discipline.

Statistics 7 satisfies the General Education requirement for Category 5a, Quantitative Literacy. The UC Irvine Academic Senate has specified learning outcomes for courses in this category as follows, and I hope you will agree at the end of the course that they have been met:

*After taking a course in Category VA, successful students will be able to do all of the following:*

- 1) Identify appropriate tools for quantitative analysis of processes or events.*
- 2) Have a basic familiarity with fundamental principles underlying quantitative descriptions of natural or social processes.*
- 3) Be able to do one or more of the following: evaluate studies and reports that assess risk and probability in everyday life; use models of natural phenomena to make quantitative predictions of future behavior or events; use models of economic and social structures to make quantitative predictions of future behavior or events.*