UCLA, Department of Statistics
Spring 2011

Statistics 10: Introduction to Statistical Reasoning

Classroom:	Physics and Astronomy Building 1425
Time:	MWF 11 am - 11:50 am
Lecturer:	Mine Çetinkaya
Email:	*mine@stat.ucla.edu*
Office:	Math Sciences 8141
Office Hours:	MW 12 pm - 1 pm If you cannot make it at these times please email me to make an appointment.
Teaching Assistants:	Nathan Langholz -*langholz@stat.ucla.edu* Patrick Crutcher -*pcrutcher@stat.ucla.edu*
Required Textbook:	Intro Stats by De Veaux, R. D., Velleman, P.F., and Bock D.E. Addison Wesley, 3^{rd} Edition, 2008, ISBN: 0-321-50045-8 and lab manual
Clicker:	Turning Point Response Card Rf Lcd Clicker
Calculator:	You are required to have a calculator and to bring it to every lecture and discussion, in-class quizzes and final. We will not be providing calculators and you will not be allowed to borrow one from another student during an exam.
Course Website:	Our class "business" will be conducted through the Moodle course management system: *http:// ccle.ucla.edu* . You should log in immediately. All assignments and announcements will be posted to this site, and you should check it daily.
Weekly Plan:	Monday: Attend 1^{st} lecture of the week Tuesday: Attend lab Turn in lab from previous week Wednesday: Attend 2^{nd} lecture of the week Thursday: Attend discussion section Friday: Attend 3^{rd} lecture of the week Turn in homework Take Moodle quiz by Monday morning 8am
Exams:	Midterm 1: Friday, April 22 Midterm 2: Friday, May 13 Final: Wednesday, June 8, 2011, 3:00pm-6:00pm
Holidays:	Monday, May 30 - Memorial Day

Tips for success:

1. Read the assigned chapters before a new week begins. And then read again after the lectures.
2. Be an active participant during the lectures, discussion sections, and labs.
3. Ask questions - during class or office hours, or by email. Ask me, your TA, and/or your classmates.
4. Do the homework - start early and make sure you attempt all questions.
5. Do not procrastinate - don't let a week go by with unanswered questions as it will just make the following week's material even more difficult to follow.

Lectures:

We will have three lectures a week, Mondays, Wednesdays, and Fridays. In order to be able to keep up with the pace of the course and not fall behind you must attend the lectures. Throughout the lectures we will be using clickers to both take attendance and to gauge your understanding of the material. You are required to bring your clicker to every lecture. To receive participation credit you need to register your clicker by following the link on Moodle (under Resources).

You can download podcasts of the lectures at *http://www.oid.ucla.edu/webcasts/courses/2010-2011/2011spring/stats10-2* . Note that the podcasts are meant as a supplement and not a replacement for attending lectures.

Discussion Sections and Labs:

In the discussion section your TA will focus more on problem solving related to the concepts that we introduce in lecture and go over questions from the Moodle quizzes. You will benefit most from the discussion sections if you actively participate, attempt the homework problems before attending section, and bring a copy of your Moodle quiz.

In the lab you will analyze data by using a user-friendly statistical analysis software called Fathom. Lab assignments will be due at the start of lab section the Tuesday of the following week (except last lab is due the day of the final), they should be typed and stapled. Lowest lab score for each student will be dropped.

You may use the Boelter Lab (*http://calendars.stat.ucla.edu/groups/labs/calendar*) while working on your assignment. Fathom is also available on CLICC Lab computers (*http://www.clicc.ucla.edu*) or available for purchase at the UCLA Book Store.

Moodle Quizzes:

Moodle quizzes are online quizzes designed to help you find any problem areas, and to help me judge how to pace the course. You will have 1 hour to complete each quiz and you must take the quizzes by yourself. Quizzes will be available on Fridays from 6 pm to Mondays at 8 am and will cover the week's material.

Moodle does not allow you to save your quiz and come back to finish it later. If you try to do so, you will lose your work and will not get another attempt. There will be no make-ups for Moodle quizzes, if you miss one you will receive a grade of zero for that quiz. Lowest quiz score for each student will be dropped.

Homework:

Homework will be assigned weekly on Moodle. The objective of the homework assignments is to help you develop a more in-depth understanding of the material covered in the lectures. Homework assignments are

due at the beginning of Friday's lecture. Your homework must be stapled, legible, and contain your name and discussion section number.

Note that some of the problems have answers in the back of the textbook, so you should use those to check your work as you go. However you must show your work - full credit will not be given to answers that do not show work. Homework assignments will be graded out 10 points: 3 points for attempting all problems, 7 points for accuracy of a number of randomly selected problems. The lowest homework score for each student will be dropped.

Late homework will not be accepted. If you cannot make it to class the day homework is due, please email me to make arrangements to drop off your homework earlier. There will be no make up homework assignments.

Attendance:

Attendance to lectures, discussion sections, and labs is mandatory. We will take attendance during lectures using clickers.

Exams:

First midterm is on Friday, April 22 and second midterm is on Friday, May 13. Final Exam is a comprehensive 3 hour exam that will be administered on Wednesday, June 8 from 3pm - 6pm. Exam dates cannot be changed. No make-up exams will be given. If you cannot take the exams on these dates you should drop this class.

You are allowed to bring one sheet of notes ("cheat sheet") to the midterms and the final. This sheet must be no larger than $8\frac{1}{2}" \times 11"$, and must be prepared by you. You may use both sides of the sheet.

Grade Breakdown:

Attendance / Participation	3%	Midterm 1	20%
Homework	10%	Midterm 2	20%
Labs	10%	Final Exam	30%
Moodle Quizzes	7%		

Grades will be curved to establish your final grade.

Policies:

- Your homework is due at the beginning of Friday's class, late homework will not be accepted.
- There will not be any make-ups for any of the Moodle quizzes, midterms, or the final exam.
- Lowest homework, lab and Moodle quiz grade will be dropped.
- All regrade requests on homework assignments and exams must be discussed with me in a timely manner. You may discuss grading of the labs with your TA, however the TA may direct you to me if the issue is not easily resolved.
- Any instances of academic dishonesty will be taken very seriously. At a minimum you will lose all points for that particular assignment. Additionally, there may be penalties to your final class grade along with being reported to the Dean's Office. Please review the Student Guide to Academic Integrity at *http://www.deanofstudents.ucla.edu/StudentGuide.pdf* .

Tentative Schedule:

Week	Date	Chapters	Topics	Assessments	Due Date
1	3/28 - 4/3	2, 3, 4, 5	Data and graphs Categorical and numerical variables *Lab Intro & Lab 1: Baby Boom*	MQ1	Friday, 4/1 - Monday, 4/4
2	4/4 - 4/10	6, 7	z-scores Normal distribution Correlation *Lab 1: Baby Boom (cont.)*	HW 1 MQ 2	Friday, 4/8 Friday, 4/8 - Monday, 4/11
3	4/11 - 4/17	7, 8, 9	Linear regression *Lab 2: Batter Up*	Lab 1 HW 2 MQ 3	Tuesday, 4/12 Friday, 4/15 Friday, 4/15 - Monday, 4/18
4	4/18 - 4/24	11	Randomness and simulations Midterm review *Lab 3: TB or not TB*	Lab 2 HW 3 **Midterm 1**	Tuesday, 4/19 Friday, 4/22 **Friday, 4/22**
5	4/25 - 5/1	12, 13	Sampling Experimental design *Lab 3: TB or not TB (cont.)*	HW 4 MQ 4	Friday, 4/29 Friday, 4/29 - Monday, 5/2
6	5/2 - 5/8	14, 15	Probability for discrete and continuous variables Normal distribution *Lab 4: Hot Hand*	Lab 3 HW 5 MQ 5	Tuesday, 5/3 Friday, 5/6 Friday, 5/6 - Monday, 5/9
7	5/9 - 5/15	18	CLT for proportions Midterm review	Lab 4 HW 6 **Midterm 2**	Tuesday, 5/10 Friday, 5/13 **Friday, 5/13**
8	5/16 - 5/22	19, 20	Inference for proportions *Lab 5: Teen Texting*	HW 7 MQ 6	Friday, 5/20 Friday, 5/20 - Monday, 5/23
9	5/23 - 5/29	22, 18	Inference for proportions (cont.) CLT for means *Lab 6: Pennies*	Lab 5 HW 8 MQ 7	Tuesday, 5/24 Friday, 5/27 Friday, 5/27 - Monday, 5/30
10	5/30 - 6/5	23	Inference for means Review / catch-up *Lab 7: Compared to what*	Lab 6 HW 9 MQ 8	Tuesday, 5/31 Friday, 6/3 Friday, 6/3 - Wednesday, 6/8
Finals	6/6 - 6/12			Lab 7 **Final**	Wednesday, 6/8 **Wednesday, 6/8, 3pm - 6pm**