UCLA, Department of Statistics
Summer 2010 - Session A

Statistics 10: Introduction to Statistical Reasoning

Classroom:	Kinsey Pavilion 1240B
Time:	MW 9:00am - 10:50am
Lecturer:	Mine Çetinkaya
Email:	*mine@stat.ucla.edu*
Office:	Math Sciences 8105F
Office Hours:	T 9:00am - 11:00pm and W 11:00am - 3:00pm If you cannot make it at these times please email me to make an appointment.
Teaching Assistant:	Colin Rundel - *crundel@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
Calculator:	You are required to have a calculator that has statistical functions (mean and standard deviation) 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://classes.stat.ucla.edu* . The first time you log in there will be special instructions to get you started. I recommend you log in as soon as possible. All homework and announcements will be posted to this site, and you should check it daily.

Weekly Plan:	Monday	Attend 1^{st} lecture of the week Take 1^{st} Moodle Quiz of the week (11:00 am to 11:50 pm)
	Tuesday	Attend discussion section
	Wednesday	Attend lab
	Thursday	Take 2^{nd} Moodle Quiz of the week (11:00 am to 11:50 pm)

Holidays: Monday, July 5 - Independence Day

Lectures:

We will have two lectures a week, Mondays and Wednesdays. This is a six week course and we will be going through a lot of material in six weeks. In order to be able to keep up with the pace of the course and not fall behind it is highly recommended to attend the lectures. Moreover, there will be one question on your final that will be nearly identical to an example question we work through in one of the lectures.

You can download podcasts of the lectures at *http://www.oid.ucla.edu/webcasts/courses/2009-2010/2010summer/stats10-3* .

Discussion Sections and Labs:

Section	Days	Time	Classroom	TA
3A	T	11:00am - 12:20am	Boelter 5440	Colin Rundel
	W	11:00am - 12:20am	Boelter 9413	
3B	T	12:30pm - 1:50pm	Boelter 5436	Colin Rundel
	W	12:30pm - 1:50pm	Boelter 9413	

In the discussion section your TA will focus more on problem solving related to the concepts that we go over in lecture. It is recommended that you attempt the homework problems before attending section and be active participants. Your TA will also solve questions that most students missed on the Moodle Quizzes therefore you are advised to print out a copy of your Moodle Quiz and bring it to discussion.

In the lab you will learn to analyze data by using a user-friendly statistical analysis software called Fathom. During the lab your TA will demonstrate the analysis. For the weekly lab assignment you will be asked to run similar analyses by yourself. Lab assignments will be due at the start of discussion section the Tuesday of the following week, they should be typed and stapled. The lowest lab score for each student will be dropped.

You may use the Boelter Lab (for lab hours go to *http://calendars.stat.ucla.edu/groups/labs/calendar/*) while working on your assignment. You can also find this link on the Moodle homepage. 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. Each week you get two attempts to take the quiz and receive the maximum of the two grades.

You will have 30 minutes to complete each quiz and you must take the quizzes by yourself. The first attempt will cover the material of Monday's lecture and will be available on

Monday, from 11:00 am to 11:50 pm (except for the third week when we lose the Monday so the first attempt will be on Tuesday, from 11:00 am to 11:50pm). The second attempt will cover the entire week's material and will be available on Thursday, from 11:00 am to 11:50 pm.

During the final week you will only have one attempt for the Moodle Quiz. This quiz will be a comprehensive review for all the material we covered.

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. The 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. The homework assignments are due before the end of Wednesday'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. The lowest homework score for each student will be dropped.

Late homework will not be accepted. If you cannot make 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.

In-class Quizzes:

Five 20 minutes in-class quizzes will be given at the beginning of Wednesday lab sessions (except for the last week when quiz will be given at the beginning of Tuesday discussion section). Each in-class quiz will consist of a number of multiple-choice questions and/or open-ended problems. All in-class quiz grading issues must be discussed with me no later than one week after the quizzes are returned. No regrades for the in-class quizzes will be offered after the final exam. The lowest in-class quiz score for each student will be dropped.

Final Exam:

Final Exam is a comprehensive 1-hour 50-min exam that will be administered on the last day of class: Wednesday, July 28, 9:00am - 10:50pm. It will consist of a number of open-ended problems. The final exam date cannot be changed. No make-up exams will be given.

If you cannot take the final exam on that date you should drop this class.

Grade Breakdown:

Homework	20%	In-class Quizzes	20%
Moodle Quizzes	10%	Final Exam	40%
Labs	10%		

Grades will be curved to establish your final grade.

Policies:

- Your homework is due before the end of Wednesday's class, late homework will not be accepted.
- There will not be any make-ups for any of the Moodle quizzes, in-class quizzes, or the final exam.
- Lowest homework, lab and in-class quiz grade will be dropped.
- You may not use your notes or any other studying materials on the in-class quizzes. You will be provided with relevant formulas.
- You are allowed to bring one sheet of notes ("cheat sheet") to the final. This sheet must be no larger than $8\frac{1}{2}" \times 11"$, and should not contain any worked examples and must be prepared by you (no photocopies). You may use both sides of the sheet. All sheets must be turned in along with the final exam.
- All regrade requests on homework assignments and in-class quizzes 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	6/21 - 6/27	2, 3, 4, 5, 6	Data and Graphs	No HW, Lab or ICQ	
			Categorical and Numerical Variables	MQ 1-1	Monday, 6/21
			Normal Distribution	MQ 1-2	Thursday, 6/24
2	6/28 - 7/4	14, 15, 16, 18	Probability	MQ 2-1	Monday, 6/28
			Random Variables	Lab 1	Tuesday, 6/29
			Central Limit Theorem	HW 1	Wednesday, 6/30
			Sampling Distribution	ICQ 1	Wednesday, 6/30
				MQ 2-2	Thursday, 7/1
3	7/5 - 7/1	18, 19, 23	**No class on Monday, July 5**		
			Sampling Distribution (cont.)	MQ 3-1	Tuesday, 7/6
			One Sample Confidence Intervals	Lab 2	Tuesday, 7/6
				HW 2	Wednesday, 7/7
				ICQ 2	Wednesday, 7/7
				MQ 3-2	Thursday, 7/8
4	7/12 - 7/18	20, 22, 23, 24	One Sample Hypothesis Testing	MQ 4-1	Monday, 7/12
			Two Sample Hypothesis Testing	Lab 3	Tuesday, 7/13
			Two Sample Confidence Intervals	HW 3	Wednesday, 7/14
				ICQ 3	Wednesday, 7/14
				MQ 4-2	Thursday, 7/15
5	7/19 - 7/25	7, 8 , 9	Relationship Between Variables	MQ 5-1	Monday, 7/19
			Linear Regression Models	Lab 4	Tuesday, 7/20
				HW 4	Wednesday, 7/21
				ICQ 4	Wednesday, 7/21
				MQ 5-2	Thursday, 7/22
6	7/26 - 7/28		Review	MQ 6	Monday, 7/26
			Final Exam	Lab 5	Tuesday, 7/27
				ICQ 5	Tuesday, 7/27
				HW 5	Wednesday, 7/28