

Statistics 300	– Introduction to Probability and Statistics (Course Code – 13044)
Time	– Summer 2009: Mon./Tue./Wed./Thu. 5:30 p.m. to 8:15 p.m. from 6/22/2009 to 7/30/2009
Room	– Learning Resource Center (LRC), Room 201
Instructor	– Lawrence C. Larsen
Phone	– (916) 346-6324
Office	– <no office on campus>
Office Hours	– 30 minutes after each class (except Thursdays)
e-mail:	– lclarsen@comcast.net
Desire2Learn	– http://d21.losrios.edu
Class Web Site	– http://wserver.crc.losrios.edu/~larsenl (All letters, no numbers)

PREREQUISITE

Intermediate algebra (Math 120 or Math 125) with a "C" or better. An automated system checks prerequisites taken in the Los Rios District from 2003 on. Show older Los Rios grade reports to the instructor, but take transcripts from outside the Los Rios Community College District to the Counseling Center (2nd floor of the Library building), and have a counselor certify that the course you took satisfies the prerequisite for this class. Please give the instructor a Los Rios transcript, an assessment test record, or approval from the counseling office by the close of class on 1-28-2009. Instructor can accept math above algebra (trigonometry, pre-calculus, etc.) if the course was taken at a college (not High School AP, unless taken at a college).

TEXTBOOK

Essentials of Statistics, 3rd Edition, paperback, by Mario F. Triola. (Required.)

The Texas Instruments Model “TI-30X IIS” or “TI-30X IIB” is **required**. This calculator is widely available for less than \$20.00 (tax included). If you have another calculator that you want to use (TI-83, etc.), you can, but you will be “on your own.”

COURSE OBJECTIVES

1. Develop skills in understanding and applying basic statistical methods.
2. Develop an appreciation for the use of statistics in decision making, and an appreciation of its limitations.
3. Develop an ability to use computers and/or calculators for statistical analysis of data.

COURSE DESCRIPTION

The course covers basic concepts, descriptive statistics, probability, random variables, probability distributions, parameter estimation, hypothesis testing, linear correlation, linear regression, contingency tables, and analysis of variance. Applications are made to business, social sciences, and natural/physical sciences.

GRADING POLICY

Every student has the opportunity to earn an "A" in the class. The whole class could also earn "C"s. Students are in competition with the material, not with each other. Grades are based on three exams and daily quizzes as follows:

Quizzes	– 25 %	(One quiz will be dropped in each Unit)
Unit1 Exam	– 25 %	(on Thursday, July 2)
Unit2 Exam	– 25 %	(on Thursday, July 16)
Unit3 Exam	– 25 %	(on Thursday, July 30)
[no exams will be dropped]		

Exams and quizzes are “open notes and open book.” Do not plan to look everything up during an exam or quiz. The exams are challenging, and many problems will not “look like” others you have practiced, though they will involve the same principles. “Open notes and open book” simply means that you will need to be very well organized. If you need to find something in the book or in your notes, you should be able to locate it in about 10 seconds (or even less).

Exercises from the book are assigned for practice in preparation for quizzes and exams. Solutions to these exercises should be collected in a spiral bound binder or in ‘blue books.’ Your work on these exercises will not be handed in or graded, but it is considered part of your notes, so you can refer to them during exams.

Letter grades will be determined by the following schedule:

A	-- 90 to 100 %
B	-- 80 to 89 %
C	-- 70 to 79 %
D	-- 60 to 69 %
F	-- less than 60 %

POLICIES

1. Missed exams are almost impossible to make up. Check the class schedule and make plans for all exams. Your cousin's wedding is not an acceptable reason to miss an exam. Talk to the instructor well ahead of an exam that presents a problem.
2. Attendance — A student who misses the first class and does not contact the instructor will be dropped at the end of that class to make room for other interested students. If you want to drop the class later on, it is your responsibility to work with Admissions and Records procedures. Do not assume the instructor will drop you if you stop attending. You may end up with an “F” on your transcript.
3. Leave all noise makers (beepers, cell-phones, etc.) at home, turned off, or silenced during class time. Talk with the instructor if you believe you need an exception to this policy.
4. Honesty (doing your own work as assigned) is required. Students may collaborate on all practice problems and "take home" quizzes, but you should try them before accepting any help from others. The instructor will follow campus policies on academic integrity. Please take this seriously, get the benefit of doing all your own work, and expect to be caught and reported if you "cheat". To reduce temptations to cheat, exams may be copied before they are returned, and multiple versions of exams may be prepared so the answers your neighbor gets may not be the correct answers for you.

RESOURCES

- Math Center
 - S informal tutoring
 - S computers special programs for statistical analysis
 - S good place to get together and work with others in the class
- MESA (Math/Engineering/Science Achievement) Center
- Instructor
 - S Phone or e-mail (call instructor to alert him if you send an e-mail)
 - S Phone or e-mail early so we have time to handle your questions in a timely way
- Desire2Learn (D2L) is a gateway to class resources on the web
<http://d2l.losrios.edu>

IMPORTANT DATES

Session	Last Day to Drop with Refund	Last Day to Drop Without Record	Last Day to Drop With a “W”
2 nd 6 Weeks	June 26	July 3	July 21

CONTACT NUMBERS

CRC Science/Math/Engineering Department (916-691-7204)
Ground floor in LCR Building

CRC Math Center (916-691-7459)
Upstairs in LRC Building

CRC Assessment Testing Center – for test proctoring (916-691-7528)
First floor of Library (Straight in from the pool)

CRC Bookstore (916-691-7319)

CRC Admissions & Records (916-691-7411)

Math / Engineering / Science / Achievement (MESA)
Library, Room 309; (916) 691-7338 or 691-7612

Links to useful web locations:

<http://statpages.org/>

Tentative Schedule Unit #1		
Date	Chapter/Sections	Sections in Textbook and Homework Exercises*
6/22	1-1, 1-2, 1-3, 1-4	1-1(study the vocabulary on pages 4 and 5); 1-2(odd problems 1-27); 1-3(odd problems 1-27); 1-4(odd problems 1-29)
6/23	1-4, 2-1, 2-2, 2-3, 2-4, 3-2	2-2(terms,5,7,9,11,13,15,21); 2-3(read only); 2-4(read only)
6/24	Quiz 1* 3-2, 3-3, 3-4, 3-5	3-2(1-5,7,9,15,17,25); 3-3(1-5,9,19,31,33,35); 3-4(1-5,7,9,11,13,15,17,19,20,22,24,27); 3-5(5);
6/25	Quiz 2 4-2, 4-3, 4-4	4-2(7,9,11,13,15,17,21,27, [if you want try this one] 36); 4-3(7,9,13,15,17,21,23,27); 4-4(7,11,13,15,17,19, [next 2 are optional] 21,23)
6/29	Quiz 3 4-5, 4-6, 5-2	4-5(5,7,11,13,15,17,19,27); 4-6(odd problems 5-15,21,23,25,27,31, [hard one] 32,33,37)
6/30	Quiz 4 5-3, 5-4	5-2(3-7,9,11,13,17,19,21); 5-3(odd problems 5-31,34); 5-4(3,5,7,9,11, 15,19)
7/1	Quiz 5 Review for Unit #1 Exam	Complete as many problems as you can in the Example Exam Questions for Unit1 (distributed to students and also available on WEB site) before this review session. Solutions will only be shown during class.
7/2	Unit #1 Exam	Material from Chapters 1, 2, 3, 4, and 5
* If necessary, the instructor may delay or delete from the schedule one or more quizzes. Homework exercises are only for your practice and will not be turned in to the instructor. Solutions to selected homework problems will be shown during class time, especially when students ask for solutions to particular problems.		

Tentative Schedule Unit #2		
Date	Chapter/Sections	Sections in Textbook and Homework Exercises*
7/6	6-2, 6-3, 6-4	6-2(1,4,odd problems 5-39, 43); 6-3(1,2,4,5,7,9,11,13,15,17,23); 6-4(read only)
7/7	Quiz 8* 6-5; 7-2	6-5(1,4,5,7,11,13,15); 7-2(3,4,9,11,21,23,25,27,29,33,35,41,43,45)
7/8	Quiz 9 7-3, 7-4; 7-5	7-3(33,35,37); 7-4(3,13,17,19,21,25); 7-5(1,2,5,7,9,11,17,19,21)
7/9	Quiz 10 8-2, 8-3; 8-4 Extra Credit Paper	8-2(odd problems 3-39, bonus 47); 8-3(1,2,3,5,8,9,11,19,23); 8-4(no problems); Explain extra credit opportunity
7/13	Quiz 11 8-5, 8-6	8-5(1,2,5,7,13,15,17,19,21,27); 8-6(1,5,7,9,11,13)
7/14	Quiz 12 9-4	9-4(5,7,11)
7/15	Quiz 13 Review for Unit #2 Exam	Complete as many problems as you can in the Example Exam Questions for Unit2 (distributed to students and also available on WEB site) before this review session. Solutions will only be shown during class.
7/16	Exam #2	Material from Chapters 6, 7, 8, and 9-4
* If necessary, the instructor may delay or delete from the schedule one or more quizzes. Homework exercises are only for your practice and will not be turned in to the instructor. Solutions to selected homework problems will be shown during class time, especially when students ask for solutions to particular problems.		

Tentative Schedule Unit #3		
Date	Chapter/Sections	Sections in Textbook and Homework Exercises*
7/20	9-2; 9-3	9-2(1,2,3,4,5,7,13,15,17,23)
7/21	Quiz 15* 9-3	9-3(5,6,7,8,9($\sigma_1=\sigma_2$),13($\sigma_1=\sigma_2$),17($\sigma_1=\sigma_2$),21($\sigma_1<\sigma_2$),23($\sigma_1<\sigma_2$))
7/22	Quiz 16 10-2, 10-3	10-2(5,9,10,11,13,15); 10-3(5,9,10,13,15,36)
7/23	Quiz 17 10-4; 10-5 (rank corr.)	10-4(5,7,13,15,17,19); 10-5(no problems) practice with the p-value method of hypothesis testing
7/27	Quiz 18 11-2, 11-3	11-2(1,2,3,5,9,12,21); 11-3(1-4,13,17,21)
7/28	Quiz 19 11-4	11-4(1-4,5,9,11)
7/29	Quiz 20 Review for Unit #3 Exam	Complete as many problems as you can in the Example Exam Questions for Unit3 (distributed to students and also available on WEB site) before this review session. Solutions will only be shown during class.
7/30	Exam #3	Material from Chapters 9, 10, 11
* If necessary, the instructor may delay or delete from the schedule one or more quizzes. Homework exercises are only for your practice and will not be turned in to the instructor. Solutions to selected homework problems will be shown during class time, especially when students ask for solutions to particular problems.		