

Lake Tahoe Community College
Math 201 – Elements of Statistics and Probability
Summer 2011 – Online

Instructor: Katie Larkin

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Web Page: <http://www.coursecompass.com/>

Live Lectures: [Click Here](#)

Archived Lectures: [Click Here](#)

Lecture Notes: <http://www.ltconline.net/green/courses/201/201.htm>

Video Examples: <http://www.ltconline.net/green/courses/201/CamtasiaStatCrunch/index.htm>

Interactive Applets: <http://www.ltconline.net/green/java/index.html#Statistics>

COURSE DESCRIPTION

This course will cover data analysis including probability, distributions, sampling, hypothesis testing, confidence intervals, regression analysis, and nonparametric analysis.

MATERIALS

Required: [MyStatLab Access Code](#)

Calculator: The TI 83, TI 84+ is required for this course. The TI 89 with the TI 83/84 downloaded or the TI nSpire will also work for this class. There are a limited number of TI 84+ calculators available for rent for \$10 at the Library.

Optional: **Textbook:** Elementary Statistics Using the TI 83-84 Plus Calculator 3rd Edition by Mario Triola

STUDENT LEARNING OUTCOMES (SLOs)

1. Design and implement an unbiased study that will produce sound statistical results.
2. Generate and interpret statistics graphs from data that arise from surveys and experiments.
3. Implement the rules of probability.
4. Apply confidence intervals and test hypotheses to make conclusions about data that come from practical applications.
5. Perform regression analysis to make informed predictions about relationships between quantitative variables.

COURSE WORK

- **Homework – online (10%)**
- **Quizzes – online (10%)**
- **[Project 1](#) – 7/3/11 (10%)**
- **Exam 1 – online 7/7/11 (10%)**
- **[Exam 2 – proctored](#) 7/28/2011 (20%)**
- **[Project 2](#) – 8/7/11 (10%)**
- **[Final Exam – proctored](#) 8/11/11 (30%)**

All exams and assignments will be graded on the following straight scale:

A: 90 - 100%, B: 80 – 89%, C: 70 - 79%, D: 60 - 69%, F: Below 60%

HOMEWORK & QUIZ POLICY

Homework and quizzes will be worked out online. Homework is due every Friday night at midnight but can always be submitted earlier. Quizzes are due every Sunday night at midnight and can also be submitted earlier. Quizzes may be taken many times (before midnight on Sunday) until you are satisfied with your score. It is highly recommended that you aim to complete the homework and submit the quiz at least 24 hours before the due date so that you can prepare for any unforeseen computer or other issues. Homework and quizzes may be worked on after the due date, but points will not be awarded. To work on a homework assignment or a quiz after the due date, go to the item labeled "Late" in the list. This can be especially helpful for review. You may also go to your Study Plan to review.

EXAM POLICY

Students are to bring calculators, pencils or pens, and paper to each proctored exam. A single 3"x5" note card may also be used. The note card can have writing on both sides. Grading will be based on the progress towards the final answer, and the demonstration of understanding of the concept that is being tested, therefore, work must be shown in detail. Students may take the exam at LTCC's assessment center free of charge or can arrange for a proctoring service at any accredited college or university at their own expense. Without a proven medical excuse, a 10% per day penalty will be given for each day the exam is taken late. The first exam will be an online exam to be submitted by midnight on Thursday July 7th. The second exam will be a proctored written exam to be taken on Thursday July 28th. The final exam will be a comprehensive, proctored, written exam that will be taken on Thursday Aug 11th.

PROJECTS

Two projects will be created for this class. For [Project 1](#), students will collect quantitative data and use a computer to display each of the charts discussed in class. [Click here for a video explanation of StatCrunch for Project 1](#). For [Project 2](#), students will conduct a survey and construct a confidence interval and perform a hypothesis test. [Click here for a video explanation of StatCrunch for Project 2](#). Each project will include the computer results and a narrative describing data collection, assumptions made, background information, how the data was analyzed, and conclusions. Unless specifically stated, all results must be computed using a computer and the computer generated results must be included with the project. The projects should be typed, double spaced, and have 12 point font. Students are to work in pairs. If you cannot work with a partner, then speak to your instructor about the possibility of working as a trio. A 10% penalty will be incurred on any student who cannot work with another student. [Rubric for the Project Grades](#). Katie will be happy to look at a rough draft of your paper if you can bring or email it to her at least 24 hours before it is due. After receiving feedback, you can ask more questions, but only one rough draft of the paper will be reviewed by Katie.

Q&A FORUM

There is a Q&A Forum set up on the [CourseCompass](#) site. For questions that are of interest to others in the class such as how to work out a statistics problem, please use the Q&A Forum rather than emailing Katie. For questions that are more individual such as personal grade issues, please email Katie.

LIVE WEBINARS

Katie will present a live webinar two - three times each week. Students are strongly encouraged to attend these live webinars, but may choose to instead view them as archived online videos if their schedules do not permit. The times and days of the webinars will be determined in the first week of class based on the results of the schedule survey. In order to get credit for attending or viewing the webinar, you must email Katie by Sunday of that week with the secret word that will be given out during the webinar. **Any student who does not participate in or view more than four of these webinars (submitted by an email to Katie by that Sunday) will either be dropped from the course (if before the drop date) or will be given an "F" for the course (if after the drop date).** To enter the live webinar click [HERE](#).

MyStatLab

It is **required** to have a software license to use the software MyStatLab in this class. Students have **two choices**. The **first choice** is to purchase the textbook new from the bookstore. The textbook comes with the software license. The **second choice** is to purchase the license alone either from the bookstore or online at coursecompass.com. The license gives you access to the textbook online. This is a more economical choice, but is only recommended to students who have online access and feel comfortable reading a computer screen instead of a traditional book. If you purchase a used textbook, you will also need to purchase the software license. The software license is valid as long as the student uses the same textbook. When you first attempt to log on you will need to put in the following course ID: **larkin78658**.

How TO SUCCEED IN THIS COURSE

- **Keep up with the work!** Statistics is a difficult subject; it is **imperative** that you keep up with the work in this class! Pay attention to the schedule and don't miss assignments.
- **Come to Every Webinars Prepared!** Before each webinar you should read the appropriate material (see schedule). You should also be sure to review previous material and ask questions when necessary.
- **Submit Homework and Quizzes Early.** Computer problems always seem to occur at the most inopportune times.
- **If LTCC local, Make use of the Math Success Center!** I do not have office hours, therefore it is imperative that you get the most out of my lectures and go to the Math Success Center if you're having any trouble at all and need some assistance. The Math Success Center, staffed with knowledgeable tutors, is located in room 201 and is open from M-TH from 9-6, FRI 10-2, and SAT 11-1. There are also computers available for use there.
- **Stay after Webinars for online help.** I will be available to answer questions after each webinar.
- **Form study groups!** They can be a great source of help! You can work together on homework assignments, but you need to submit the answer you believe is correct.

IMPORTANT DATES

- **June 24:** Last day to drop with a full refund
- **July 5:** Last day to drop with no record
- **July 22:** Last day to drop with a 'W'

STUDENTS WITH DISABILITIES

If you have a certified learning disability that may affect your performance in this class, be sure to discuss your special needs with me during the first week of class. Learning disabilities will be accommodated. Please let me know if you're hearing impaired right away so the webinars can be accommodated.

ACADEMIC INTEGRITY

Cheating will be defined as but not limited to: (1) using any method to copy another's work on an exam or final (2) directly copying another student's homework assignment (3) using any method other than your own honest efforts to complete exams or the final.

The following activities are NOT cheating: (1) collaborating with other students to complete homework assignments (2) working with math tutors or academic coaches to complete homework assignments (3) working with other students to study for exams or the final.

Disciplinary actions for cheating in this class: Cheating will result in a grade of zero on the item on which the cheating occurred. The worst thing about cheating, however, is compromising your character for such a small reward.

SCHEDULE

Week	Chapters	PowerPoints in PDF
Week 1	Ch 1 (All Sections) Ch 2 (All Sections)	Lecture 1 , Lecture 2 Lecture 3
Week 2	Ch 3 (All Sections) Ch 4 (Sections 1 – 7) Project 1	Lecture 4 Lecture 5 , Lecture 6 7/3/2011
Week 3	Exam 1 Ch 5 (Sections 1 – 3) Ch 6.1 - 6.3	7/7/2011 Lecture 7 Lecture 8
Week 4	Ch 6.4 - 6.6 Ch 7 (Sections 1 – 4)	Lecture 9 Lecture 10 , Lecture 11
Week 5	Ch 8 (Sections 1 – 5) Ch 9 (Sections 1 – 4)	Lecture 12 Lecture 13 , Lecture 14
Week 6	Exam 2 Ch 10 (Sections 1 – 4)	7/28/2011 Lecture 15 , Lecture 16
Week 7	Ch 11 (Sections 1 – 3) Ch 12 (Sections 1 – 2) Project 2	Lecture 17 Lecture 18 8/7/2011
Week 8	Review Final Exam	Lecture 19 8/11/2011