Lake Tahoe Community College Math 201 – Elements of Statistics and Probability Fall 2015 – Section 2 – Online

Instructor: Katie McConaghy **Email:** piontheside@gmail.com

Web Page: http://www.cccmoodle.org/

Live Lectures:

https://sas.elluminate.com/site/external/launch/meeting.jnlp?sid=2007002&password=M.618D488BF7AC2959AEDAB938821FDC

Archived Lectures:

 $\underline{https://sas.elluminate.com/site/external/recording/playback/link/table/meeting?suid=M.9D5BE470BA03}$

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Textbook: http://cnx.org/content/col11562/latest/

Lecture Notes: http://www.ltcconline.net/greenl/courses/201/201.htm

Video Examples: http://www.ltcconline.net/greenl/courses/201/CamtasiaStatCrunch/index.htm

Interactive Applets: http://www.ltcconline.net/greenl/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

- <u>Calculator</u>: 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 LTCC Library.
- <u>Textbook</u>: Instead of a traditional textbook, this class will use an interactive multimedia online learning system. This system is free of charge. Printed versions are for sale online.

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 (20%)
- **Project 1** 10/22/15 (10%)
- Online Exam 10/26/15
- <u>Midterm proctored</u> 11/17/15 (20%)
- **Project 2 11/24/15 (10%)**
- Final Exam proctored 12/8/15 (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%

MOODLE

Moodle will be our virtual classroom where I will post handouts, class notes, announcements, etc. You will take weekly quizzes on Moodle and view suggested homework problems to do from the book. If you already have a Moodle account, login using your previously established username and password. To access Moodle for the first time, simply go to www.cccmoodle.org. Your username is your first initial and last name (Mary Foote: mfoote), and your password is change. You will be prompted to change your password upon your first login. Let Katie know right away if you have any issue logging on.

Q&A FORUM

There is a Q&A Forum set up on the Moodle site. For questions that arise outside of class that are of interest to others such as how to work out a statistics problem, please use the Q&A Forum rather than emailing me. For questions that are more individual such as personal grade issues, please email me.

QUIZ & HOMEWORK POLICY

Homework and quizzes are to be done on the Moodle by the due date. It is strongly recommended that you keep a journal of the written responses to the homework and quiz questions. This will help you prepare for the projects, midterm and final exam. Homework and Quizzes are due at 11:55 PM on Sundays (unless otherwise stated), but it is recommended that you complete your work by Saturday night. Homework and Quizzes may be taken many times (before 11:55 PM on Sunday) until you are satisfied with you score. Time extensions will not be given, but students will be able to work on "late" assignments for no credit but plenty of learning. By Oct 26th at 11:55 PM, you must complete your online exam that covers Chapters 1 through 6. This exam is much longer than a quiz and can only be taken once. It is given the weight of 4 quizzes. There is no time limit for the homework, quizzes and online exam, as long as you finish before the deadline.

EXAM POLICY

Students are to bring calculators, pencils or pens, and paper to each proctored exam. A single 4"x 6" 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. Students need to inform Katie of the proctoring logistics at least a week before taking the exam. The midterm will be a proctored written exam to be taken BY Tuesday, Nov 17th. The final exam will be a comprehensive, proctored, written exam that will be taken BY Tuesday, Dec 8th.

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 15% 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 48 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.

LIVE WEBINARS

Katie will present a live webinar one – two 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 webinar schedule will be posted in the News Forum in Moodle. 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.

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 & 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. There are also computers available for use.
- 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

- Oct 2: Last day to drop with a full refund and no record
- Oct 16: Last day to declare P/NP grading option
- Oct 22: Project 1
- Oct 26: Online exam
- Nov 6: Last day to drop with a 'W'
- Nov 17: Midterm
- **Nov 24:** Project 2
- **Dec 8:** Comprehensive final exam

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.

TENTATIVE SCHEDULE

Week	Beginning	Chapters	Due Dates
Week 1	9/21/15	Ch 1 Ch 2	9/27/15
Week 2	9/28/15	Ch 3	10/4/15
Week 3	10/5/15	Ch 4 Ch 5	10/11/15
Week 4	10/12/15	Ch 6	10/18/15
Week 5	10/19/15	Project 1 Ch 7	10/22/15 10/25/15
Week 6	10/26/15	Online Exam Ch 8	10/26/15 11/1/5
Week 7	11/2/15	Ch 9	11/8/15
Week 8	11/9/15	Ch 10	11/15/15
Week 9	11/16/15	Proctored Midterm Ch 11	11/17/15 11/22/15
Week 10	11/23/15	Project 2 Ch 12	11/24/15 11/29/15
Week 11	11/30/15	Ch 13	12/6/15
Week 12	12/7/15	Final	12/8/15

^{*}Subject to change.