Lake Tahoe Community College Math 201 – Elements of Statistics and Probability Winter 2012 – Section 2

Instructor: Katie Larkin **Email:** piontheside@gmail.com **Time:** T/Th 1:00 – 3:25pm

Room: A208

Moodle: http://www.cccmoodle.org/

Supplemental 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 Library.

<u>Textbook</u>: Interactive Multimedia Online Learning System. This text is FREE for this quarter only. Click on this <u>link</u> for information on how to access the text.

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

- Attendance (5%)
- Quizzes online (15%)
- In Class Assignments (10%)
- **Project 1 1/26/12 (10%)**
- Exam 1 1/31/12 (15%)
- Exam 2 2/28/2012 (15%)
- **Project 2 3/15/12 (10%)**
- Final Exam $\frac{3}{22}/12 (20\%)$

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%

ATTENDANCE POLICY

Attendance will be taken at the start of class. You will get 2 points for arriving on time and leaving when the class is dismissed. If you're late or leave early, you will receive 1 point and if you are absent you will receive 0.

HOMEWORK POLICY

Homework is not graded but STRONGLY recommended. It is essential that you work the homework problems that coincide with the material being taught in class. It would be helpful to keep an organized notebook of homework problems to study from for the exams.

IN CLASS ASSIGNMENT POLICY

In class assignments will sometimes be collected and graded. This can include pop quizzes. It is important to be on time and prepared for class in case an assignment is given. No make ups will be offered.

QUIZ POLICY

Quizzes will be given each week on Moodle. Quizzes must be completed by 11:55pm Sunday. You may take the quizzes as many times as you'd like until you're satisfied with your score. Once the quiz is closed out, you may not access it again. It is strongly recommended that you do not wait until the last minute to take the quizzes for multiple learning reasons but also to avoid technical difficulties that sometimes occur while working online.

EXAM POLICY

Students are to bring calculators, pencils or pens, and paper to each exam. A single 3"x5" note card may also be used. The note card can have writing on both sides. Grading will 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. No make ups will be offered. The final exam will be a comprehensive, written exam that will be taken on Thursday Mar 22nd.

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 me 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. I will be happy to look at a rough draft of your paper if you can bring or email it to me 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.

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. You will be expected to print out the chapter lecture notes and bring them to class with you daily. 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.

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.

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 Class Prepared! Before each class you should read the appropriate material (see schedule). You should also be sure to review previous material and ask questions when necessary.
- Submit Quizzes Early. Computer problems always seem to occur at the most inopportune times.
- Make use of the Math Success Center! I do not have set 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.
- 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

- Jan 13: Last day to drop with a full refund
- Jan 27: Last day to drop with no record or declare P/NP
- **Feb 16**: Last day to drop with a 'W'
- Mar 22: Final Exam 1-2:50pm

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 (subject to change)

Week of	Chapters	Due Date
1/1/2012	Ch 1	
1/8/2012	Ch 2	
	Ch 3	
1/15/2012	Ch 3	
	Ch 4	_
1/22/2012	Ch 5	_
	Review	_
	Project 1	1/26/2012
1/29/2012	Exam 1 (Ch 1 - 5)	1/31/2012
	Ch 6	
2/5/2012	Ch 7	
	Ch 8	
2/12/2012	Ch 9	1
	Ch 10	-
2/19/2012	Ch 10	
	Review	
2/26/2012	Exam 2 (Ch 6 - 10)	2/28/2012
	Ch 11	
3/4/2012	Ch 12	
3/11/2012	Ch 13	
	Review	
	Project 2	3/15/2012
3/18/2012	Final	3/22/2012