Math 10: Elementary Statistics – Winter 2016

COURSE	DAYS	TIME	ROOM	INSTRUCTOR: Kathy Plum
Math10.24 (30315)	TTh	1:30 – 3:45 PM	S46	
				OFFICE ROOM: S76H
OFFICE HOURS: TTh 11:00 AM – 12:15 PM; W 10 – 10:50 AM				E-MAIL:plumkathryn@deanza.edu
Website: deanza.edu/faculty/plumkathyrn				

Welcome to Elementary Statistics. This is a **demanding**, but rewarding class. If you cannot commit to a minimum of 10 hours per week of study outside of class, then you should take this class in a quarter when you have the time. This is also a collaborative class. You will be expected to work with your classmates both inside and outside of class (no exceptions). This class makes use of the Catalyst.deanza.edu system for class communication and the taking of some quizzes.

Student Learning Outcomes (what you should be able to demonstrate by the end of the course):
1. Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.
2. Identify, evaluate, interpret and describe data distributions through the study of sampling distributions.
3. Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

READ THROUGH THE ENTIRE GREENSHEET SO THAT YOU ARE FAMILIAR WITH THE CLASS.

Prerequisite: Passing grade (C or better) in Intermediate Algebra or placement exam; Advisory: English Writing 100 and Reading 100 (or Language Arts 100), or English as a Second Language equivalent courses

Book: Collaborative Statistics (2008, ISBN: 0978745000) by Illowsky and Dean
Note: This text is available for **FREE** downloading at: http://cnx.org. Access the text by text title, Collaborative Statistics. You may download the text for free onto your computer and print out the pages you want. An enhanced version of the text will also be available, access to which will be explained the first class meeting. (Note: If you plan on printing the entire book, it's less expensive to purchase the hard copy at the Bookstore.)

Related Materials: TI-83 PLUS or TI-84 graphing calculator preferred (TI-86 or 89 are acceptable, but I will only teach the methodologies using the TI-83 and TI-84); small stapler; small pencil sharpener; small ruler.

Other useful information: Look through the website for Roberta Bloom for a wealth of information – help with understanding concepts, sample quizzes and test questions, labs, TI calculator instructions and MUCH, MUCH, more.

Quizzes: Quizzes will be taken online through Catalyst.deanza.edu and are to be complete by 11:55 pm on the date given on the calendar. You will have 40 minutes to complete the quiz from the time you start the quiz. Quizzes will test your understanding and completion of the homework problems. You will need to do the homework thoroughly and completely to do well on the quizzes. Since your lowest 3 quiz scores will be dropped when calculating your class grade, **there are no make-ups for quizzes.**

Labs & Projects: Labs & projects make use of the calculator. Bring a copy (printed or on lap top) of the assignment with you to class. You must be in class on the day a lab is started to get the data and credit for the labs. If you miss class on the day of a lab, you will not be allowed to turn in the lab on your own. In most cases, there will not be enough time to complete labs or projects in class, therefore you must make time to meet with your group outside of class. **No make-ups or late papers will be accepted**. You may turn them in early.

Homework: The purpose of homework is to help you learn the material in the course. Graded homework will be done in a program called WebAssign (http://webassign.net)will be used to do graded homework problems. The cost for using WebAssign is approximately $30. I suggest you do the odd problems at the end of the chapter before attempting the WebAssign problems. The WebAssign homework for each chapter is due by 11:59 pm on the date listed on the calendar. Since your lowest 3 homework scores will be dropped when calculating your class grade, **there are no make-ups for homework.**

Class Activities: Group work on Chapter recaps will be done the days indicated on the calendar. Access the Recaps via Catalyst. Make sure you bring them with you to class. Completion of these recaps will be recorded as your exit ticket for the day or if not completed.

Exams: 3 exams will be given. Each exam consists of 21 multiple choice questions. Bring a brown scantron (#2052 at bookstore). No make-ups are given. Exams are closed book. Students mayuse during the exam one 8 ½" x 11" page (both sides) of notes, a calculator, and, if English is a second language, an English translation dictionary.

Final Exam: A two-hour comprehensive exam will be given. The exam consists of 42 multiple choice questions. If you miss the final exam, you will receive an F for the course. Bring a brown scantron (#2052). Students may use 2 pages (both sides) of notes to during the final.

Attendance: Class attendance is essential to student success in math. You are expected to be present, prompt and prepared to ask questions about the assigned homework for all class meetings. Coming late to class is irresponsible, impolite and disruptive to your classmates and is not acceptable. However, even with the best of planning, 'life' gets in the way sometimes. It is better if you come in late, than to not show up. Missing 2 days of class could result in your being dropped from the class. Students not in attendance when labs are started will not be allowed to make-up the lab. It is YOUR responsibility to drop the course should you decide to stop attending, DO NOT rely on me to do it for you.

Grade:

			Lowest percentage for:		
Exams (3 @ 100)	300 pts. ***		A+: 97%	A: 94%	A – : 90%
Quizzes (13 @ 10)	100 pts. (drop 3 lowest)		B+: 86%	B: 81%	B – : 78%
Labs (4 @ 30)	90 pts. (drop 1 lowest)		C+: 74%	C: 66%	
Projects(1@50, 1@25)	75 pts. (both count)		D+: 63%	D: 57%	D –: 55%
Ch. Recaps (13@8)	80 pts. (drop 3 lowest)		F: 0		
WebAssign HW (13@10)	100 pts. (drop 3 lowest)				
Final Exam	100 pts.				

Miscellaneous
- Bring your book and calculator to every class. If you downloaded the book to your laptop, you may use your laptop during class but not during quizzes or exams.
- Papers received 5 minutes after the official start time of class are considered late and will not be accepted.
- Take-home papers will not be graded unless they are STAPLED (no doggy-ears or paper clips) before class. All papers turned in must be NEAT to earn full credit.
- CELL PHONES, ipods, and other electronic devices (except your calculator or laptop) must be turned off and put away during class. Absolutely no noise from them! You MAY NOT use your computer during exams.
- Additional tutors are available in S – 43, the math and science tutoring center. The tutoring center offers tutor-led study groups and tutors as assistants in the labs (S42 and S48). Go to S-43 to sign up for tutoring.
- Students are encouraged to form study groups. Go to S – 43 for help in creating a group with a tutor.
- ***At the end of the quarter, if the final exam is the lowest exam, it will count as 1 exam. Therefore, the final exam and all other exams will count. If one of the 3 midterm exams is the lowest or missed, then that midterm score will be replaced by the final score. Therefore, the final exam will count twice. In summary, you will have a total of 400 exam points.
- Your grade is based on the percentages listed above and not a "curve."
- You are expected to answer word problems and questions with complete English sentences.
- CHEATING WILL NOT BE TOLERATED. If anyone is caught cheating, he or she will receive an F for the course and reported to the appropriate college officials. Penalties include the possibility of being expelled from the college..

Testing or other accommodations: If you have a learning or other disability, please contact either the Educational Diagnostic Center (LCW-110, 408-864-8839) or Disability Student Services (SCS-141, 408-864-8753) to arrange for in-class and/or testing accommodations. Please make sure you take care of the paperwork for test accommodation by the end of the second week of class.

Topics to Skip
Ch 3:   Venn diagrams
Ch 4:   Poisson, Geometric, Hypergeometric Distributions
Ch 5:   Conditional Probability with Uniform Distributions
Ch 7:   Central Limit Theorem for Sums
Ch 11:   Test of One Variance
Ch 12:   Outliers
Ch 13:   Two variances

Note: Please bring your book (hard or soft copy) and calculator every time we meet. Calendar subject to change as needed.

Date	What's happening today	What's Due
Tue 1/5	- Introductions - Catalyst, WebAssign - Chapter 1 – Terms and Sampling	
Thurs 1/7	- Catalyst and WebAssign issues - Chapter 1 – Finish - Chapter 1 Recap – bring a copy with you to class	

Date	What's happening today	What's Due
Tue 1/12	- Chapter 1 Lab – bring copy with you to class - TI-83/84 calculator neeed - Chapter 2	- Homework Due: Chapter 1 - Quiz Due Wed: Chapter 1
Thurs 1/14	- Finish Chapter 2 - Chapter 2 Recap - Start Project 1 – Baseball Lab – bring copy with you	

Date	What's happening today	What's Due
Tue 1/19	Chapter 3 – Probabilities and Trees	- Lab Due: Chapter 1 - Homework Due: Chapter 2 - Quiz Due Wed: Chapter 2
Thurs 1/21	- Chapter 3 – Contingency Tables - Chapter 3 Recap - Review for Exam 1	

Date	What's happening today	What's Due
Tue 1/26	**Exam 1 – Chapters 1, 2, 3** - Chapter 4 - General	- Homework Due: Chapter 3 - Quiz Due Wed: Chapter 3 - Project 1 Due
Thurs 1/28	- Chapter 4 Binomial - Chapter 4 lab – bring copy with you	

Date	What's happening today	What's Due
Tue 2/2	- Chapter 4 Recap - Chapter 5 - Uniform	- Homework Due: Chapter 4 - Quiz Due Wed: Chapter 4
Thurs 2/4	- Chapter 5 – Exponential - Chapter 5 Recap	

Date	What's happening today	What's Due
Tue 2/9	- Chapter 6 - Chapter 6 Lab - Chapter 6 Recap	- Lab Due: Chapter 4 - Homework Due: Chapter 5 - Quiz Due: Chapter 5
Thurs 2/11	- Chapter 7 - Chapter 7 Recap - Review for Exam 2	

Date	What's happening today	What's Due
Tue 2/16	**Exam 2 – Chapter 4, 5, 6, 7** - Chapter 8 – Single Proportion	- Homework Due: Chapter 6 & 7 - Quizzes Due Wed: Chapter 6 & 7 - Lab Due: Chapter 6
Thurs 2/18	- Chapter 8 – Single Mean - Chapter 8 Lab - Chapter 8 Recap	

Note: Please bring your book (hard or soft copy) and calculator every time we meet. Calendar subject to change as needed.

Date	What's happening today	What's Due
Tue 2/ 23	▪ Chapter 9	▪ Lab Due: Chapter 8 ▪ Homework Due: Chapter 8 ▪ Quiz Due Wed: Chapter 8
Thurs 2/25	▪ Finish Chapter 9 ▪ Chapter 9 Recap ▪ Start Project 2 – bring copy with you to class	▪

Date	What's happening today	What's Due
Tue 3/1	▪ Chapter 10 – two means and two proportions ▪ Chapter 10 Recap (start)	▪ Homework Due: Chapter 9 ▪ Quiz Due Wed: Chapter 9
Thurs 3/3	▪ Chapter 10 – matched pairs ▪ Chapter 10 Recap (finish) ▪ Review for Exam 3	▪ Project 2 status check

Date	What's happening today	What's Due
Tue 3/8	▪ **Exam 3 – Chapters 8, 9, 10** ▪ Chapter 11 Goodness of Fit	▪ Homework Due: Chapter 10 ▪ Quiz Due: Chapter 10 ▪ Project 2 Due
Thurs 3/10	▪ Chapter 11 – Test of Independence ▪ Chapter 11 Recap	▪

Date	What's happening today	What's Due
Tue 3/15	▪ Chapter 12 ▪ Chapter 12 Lab – due at the end of class ▪ Chapter 12 Recap	▪ Homework Due: Chapter 11 ▪ Quiz Due: Chapter 11
Thurs 3/17	▪ Chapter 13 ▪ Chapter 13 Recap	▪ Homework Due: Chapter 12 ▪ Quiz Due: Chapter 12

Date	What's happening today	What's Due
Tue 3/22	**Final Exam** **1:45 – 3:45 PM**	▪ Homework Due – Chapter 13 ▪ Quiz Due Wed – Chapter 13