Math 10: Elementary Statistics (MPS) – Winter 2015

COURSE	DAY	TIME	ROOM	INSTRUCTOR: Kathy Plum	
Math10.MP2 (33138)	M-Th	1:30 – 3:45 PM	E34	OFFICE PHONE: 408-864-8255	
				OFFICE ROOM: S76d	
OFFICE HOURS: 10:	30 AM – 11:20	E-MAIL:plumkathryn@deanza.edu			
Website: www.deanza	.edu/faculty/p				

Welcome to Elementary Statistics. This is a <u>demanding</u>, but rewarding class. If you cannot commit to a minimum of 15 hours per week of study, 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).

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: Introductory Statistics from OpenStax

Note: This text is available for FREE downloading at: http://openstaxcollege.org/textbooks/introductory-statistics

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: In addition to my website, look through Roberta Bloom's website

 $(\underline{\text{http://www.deanza.edu/faculty/bloomroberta}})$ for a wealth of resources to help you with the material to be learned

in this course.

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 missed quizzes.

Labs & Projects: Labs & projects make use of the calculator. All labs and Project 1 will be done as groups of 3 or 4 students (no

exceptions). Project 2 will be done in pairs of students. You must be in class on the day a lab is started to get 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, you will not be able to complete the labs or projects in class, so it will be necessary for you to work 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 for this course. Graded homework comes in two parts for

this course. A program called WebAssign (http://webassign.net) will be used to do graded homework problems. The cost for using WebAssign is approximately \$34. Since your lowest 3 homework scores will be dropped when

calculating your class grade, there are no make-ups for missed homework.

Class Activities: Group work will be done almost daily with completion of the worksheets recorded for grade. Your lowest 5 daily worksheets will be dropped at the end of the quarter, therefore no make-ups are allowed for missed worksheets. In

addition, Chapter recaps will be done on the dates indicated on the calendar. You must be in class on the day the recap is to be done in order to get credit for your work. Since your lowest 3 recap scores will be dropped when

calculating your class grade, no make-ups are allowed for missed recaps.

Entrance cards: 8 times during the quarter the class will begin with a short 'Entrance card' question about the previous days

material. These are unannounced and you may use your notes to answer the question. The time limit for these will be less than 15 minutes, therefore it is important that you come to class on time. Your lowest 2 scores will be

dropped.

Exams: 3 exams will be given. Each exam consists of 21 multiple choice questions. Bring a small brown scantron (#2052 at

bookstore). No make-ups are given. Exams are closed book. Students may bring to the exam one $8\frac{1}{2}$ " 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. Bring a brown

scantron (#2052). Students may bring 2 pages (both sides) of notes to 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. 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: Exams (4 @ 100) 400 pts. *** A+: 97% A: 94%

Exams (4 @ 100) A -: 90% Quizzes (13 @ 10) 100 pts. (drop 3 lowest) B+: 86% B: 81% B-: 78% Labs (7 @ 20) 100 pts. (drop 2 lowest) C+: 74% C: 66% **Projects** 65 pts. (both count) D+: 63% D: 57% D -: 55% Class Worksheets (? @ 2) ?? pts (drop lowest 5) F:

WebAssign (13 @ 10) 100 pts. (drop 3 lowest) Ch. Recaps (13 @ 8) 80 pts (drop 3 lowest) Entrance card (8@ 5) 30 pts. (drop 2 lowest)

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 exams.
- Chapter videos and podcasts to download are available through De Anza's iTunes site
- Late papers after the official start time of class will not be accepted.
- 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! If one goes off during a quiz or exam, you risk having your paper taken from you. You MAY NOT use your computer during exams or in-class quizzes.
- 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 points and not a "curve."
- 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.

Student Services:

http://www.deanza.edu/studentservices/ De Anza College has many support services to help you succeed in college. This web site leads you to information about financial aid, child care, counseling, academic support, disability support, student activities, and other services that are here for you. The physical location for most of these services is in the Student Community Services Building.

Dropping the Course: from Admissions and Records

Please pay attention to college dates for dropping or withdrawing from the course. It is your responsibility to drop or withdraw should you decide to stop attending class.

Topics to Skip

Ch 3: Venn diagrams

Ch 4: Poisson, Geometric, Hypergeometric Distributions

Ch. 5: Conditional Probability with Uniform Distribution

Ch 7: Central Limit Theorem for Sums

Ch 11: Test of One Variance

Ch 13: Test of Two Variances

This is schedule at a glance. Due dates in Catalyst and WebAssign will usually take precedence. Subject to change as needed.

Week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Jan	Ch. 1 Key Terms	Ch. 1	Ch. 1	Ch. 1	QUIZ DUE:
	Introductions	Sampling	Frequency Tables	HW DUE: CH. 1	CH. 1
Week	Access Catalyst			Start Lab: Ch. 1	NO CLASS
1	/WebAssign		_	Chap 1 Recap	
	5	6	7	8	9
Jan	Ch. 2 Calculations	Ch. 2	Ch. 2 Histograms	Ch. 2	QUIZ DUE:
Weels	You need a caluclator	Percentiles/Boxplots		HW DUE: CH. 2	CH. 2 NO CLASS
Week 2	today.			LAB DUE: CH. 1 Start Project 1	NO CLASS
				Chap 2 Recap	
	12	13	14	15	16
Jan	MLK HOLIDAY	Ch. 3	Ch. 3 Trees and	HW DUE: CH. 3	QUIZ DUE:
Week	NO CLASS	Sample space and	Contingency Tables	Start Lab: Ch. 3	CH. 3
3		Equations	<i>U</i> ,	Chap 3 Recap	NO CLASS
	19	20	21	22	23
Jan	Project 1 Due	EXAM 1	Ch. 4 Binomial	Lab due: Ch 3	
Week	Exam 1 Review	Ch. 1, 2, 3		HW Due: CH. 4	
4		Ch. 4 Generic		Project 1 DUE	
				Start Lab: Ch. 4	
	26	27	28	29	30
Feb	Quiz Due: CH. 4	Ch. 5 Uniform	Ch. 5 Exponential	HW DUE: CH. 5	QUIZ DUE:
Week	Group work on			LAB DUE: CH. 4	CH. 5
5	Chapter 4 Recap			Chapter 5 Recap Ch. 6	NO CLASS
	2	2	4		
D-1-	2 HW DUE: CH. 6	Ch. 7	4 HW DUE: CH. 7	5 OHZ DUE: CH 7	HOLIDAY
Feb Week		QUIZ DUE: CH. 6	Start Lab: Ch. 7	QUIZ DUE: CH. 7	HOLIDAY
6 week	Group work on Chapter 6 Recap	QUIZ DUE: CH. 0	Start Lab: Cli. /	Chapter 7 Recap	
0	Chapter o Recap				
	9	10	11	12	13
Feb	HOLIDAY	Exam 2 Review	EXAM 2	Ch. 8 Means	NO CLASS
Week	HOLIDAT	LAMIII 2 REVIEW	Ch. 4, 5, 6, 7	Cii. 6 ivicans	NO CLASS
7			LAB DUE: CH. 7		
			Ch. 8 Proportions		
	16	17	18	19	20
Feb	HW DUE: CH. 8	QUIZ DUE: CH. 8	Ch. 9	Ch. 9 Single	QUIZ DUE:
Week	Start Lab: Ch. 8	Chap 8 Recap	Hypotheses/Error/Test	Proportion	CH. 9
8			of Single Mean	HW DUE: CH. 9	NO CLASS
			Start Project 2	Chap 9 Recap	
<u> </u>	23	24	25	26	27
Mar	Ch. 10 Two Means	Ch. 10 Two	Ch. 10 Matched	HW DUE: CH. 10	QUIZ DUE:
Week 9	LAB DUE: CH. 8	Proportions	Project 2 status check	Start Lab: Ch. 10	CH. 10
9	2	3	4	Chap 10 recap 5	NO CLASS
Mar	Exam 3 Review	EXAM 3	Ch. 11 TOI	HW DUE: CH. 11	QUIZ DUE:
Week	LAIN J KEVIEW	Ch. 8, 9, 10	LAB DUE: CH. 10	Group work on	CH. 11
10		Project 2 Due	LID DOES CIL. 10	Chapter 11 Recap	NO CLASS
		3:15 – 3:45 GOF			
	9	10	11	12	13
Mar	Ch. 12	HW DUE: CH. 12	Ch. 13	HW DUE: CH. 13	QUIZ DUE:
Week	Start Lab: Ch. 12	Chapter 12 reacp	QUIZ DUE: CH. 12	Chapter 13 recap	СН. 13
11		-		_	NO CLASS
	16	17	18	19	20
Mar	LAB DUE: Ch. 12	NO CLASS	NO CLASS	FINAL EXAM	NO CLASS
Week	Final Exam Review			1:45 – 3:45 PM	
12	22	24	27	24	27
	23	24	25	26	27