Math 10.10 CRN 01511 Elementary Statistics & Probability De Anza College FALL 2017 10:30 am – 11:20 am 5 days: MTWThF Instructor: Roberta Bloom



Welcome to Math 10 Statistics!

We study basic statistical methods to analyze, interpret and make inferences from data. Statistics is used in the real world in many ways that affect your daily life, as well as being an important part of many fields of college study and professions. Understanding statistical methods helps you make informed decisions in your personal and professional life.

Student Learning Outcomes:

- 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, describe data distributions through study of sampling distributions and probability theory.
- **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.

Course outline - official list of required topics: http://ecms.deanza.edu/deptoutlinespublic.html Instructor and Contact Information Instructor: Roberta Bloom Phone: 408-864-8591 Office S33N email: bloomroberta@deanza.edu email is preferred Office Hours: Mon-Thurs: 11:35 am – 12:15 pm Mon. afternoon: 2:00 pm-2:40 pm Instructor's Websites: http://deanza.edu/faculty/bloomroberta/ Also Course Studio in MyPortal

Math Prerequisite: Math 114 Intermediate Algebra with grade of C or better; or equivalent placement English Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273

Although this is a Math course, English reading comprehension and writing are very important in Math 10.

Math 10 is a demanding, but rewarding class. To transfer to 4-year colleges, the colleges require Math 10 to cover a lot of material, so we move at a rapid pace. This class requires daily attendance and 10 hours per week of study each week outside of class. Please review your schedule now to plan time for the work needed to succeed. This is a collaborative class; you are expected to work with your classmates both in and outside of class.

Materials & Resources required for this class:

- http://deanza.edu/faculty/bloomroberta and Course Studio in MyPortal
- Textbook: Introductory Statistics from OpenStax: available FREE online or print book under \$40 in bookstore Links to free online textbook or downloadable pdf file: <u>https://openstax.org/details/introductory-statistics</u> OR <u>http://cnx.org/contents/30189442-6998-4686-ac05-ed152b91b9de/Introductory_Statistics</u>
- Webassign online homework system: under \$40 if purchased directly online: <u>http://www.webassign.net</u>
- TI-83+ or TI-84+ calculator (more info on page 4)

Bring To Class Daily: course notes for current chapter; calculator & 4 spare AAA batteries, ruler, small stapler

Important Dates:Check online academic calendar to confirm & verify dates in case of change or error.No Class:Fri. 11/10, Th.&Fri. 11/23&24Last day to Add: Sat. 10/7Last day to Drop (no W): Sun. 10/8Last day to Elect P/NP:Fri. 10/20Last day to Withdraw (W): Fri. 11/17College enforces all deadlines.Final Exam:Thurs. 12/14: 9:15 am - 11:15 am - this is the college mandated official final exam date/time.

Materials & Resources required for this class:

Open Website: <u>http://deanza.edu/faculty/bloomroberta</u> contains link to Syllabus, Chapter Notes, links to videos, practice for exams and other resources. This website is open to the public and does not require a log-in or password.

Course Studio: some course resources will not be posted on the open website but will be posted in Course Studio within MyPortal. This material can be accessed only by students enrolled in the course in the current quarter.

Email: To contact the instructor, use email bloomroberta@fhda.edu or bloomroberta@deanza.edu . (Both addresses direct email to the same place.) On occasion the instructor will send information, updates, or resources to the class by email. Please check your email frequently. The only address the instructor can use to send you email is the email address you have put into MyPortal. Please check the email address you have in MyPortal and correct it if needed.

- WebAssign: Chapter homework is collected and graded using Webassign. Available on Wednesday of first week. <u>http://www.webassign.net</u>. To get started, click <u>CLASS KEY</u> Enter key deanza 2203 0087 into the boxes and submit. Follow online instructions. First & last name: use your official registration name <u>exactly</u> as in MyPortal. Use same email address as in MyPortal for all college business. (If email address in "MyPortal" is not correct, put correct email address into both Webassign and MyPortal.)
 - Cost: under \$40 for the quarter; pay online with debit or credit card. FREE during first 2 weeks of the quarter only. For students with financial aid vouchers, access codes are available in bookstore, but cost is slightly higher.
 - Need help logging into Webassign? Contact Webassign http://www.webassign.net/info/contact_us.html <u>http://www.webassign.net/user_support/student/index.html</u>; see <u>www.webassign.net</u> for their help hours. Webassign Phone Tech Help: (800) 955- 8275 OR See the instructor during office hours.

Textbook: Introductory Statistics from OpenStax, by Illowsky & Dean

- free web version at <u>https://openstax.org/details/introductory-statistics</u> or http://cnx.org/contents/30189442-6998-4686-ac05-ed152b91b9de/Introductory Statistics
- free pdf file of complete print version download from OpenStax site at link above
- print book can be purchased at the bookstore cost under \$40 new; used or rental copies may be available

Calculator Required: TI-83, TI-83+, or TI-84+: we use them every day in class; they have statistics "apps" to make statistical calculations easy instead of tedious. Instructor demonstrates their use in class.

- TI-89 and TI-Nspire are acceptable but NOT recommended as they are harder to use for this class .
- Students using TI-89 or TI-Nspire, must take sole responsibility for getting programs and learning to use them
- If your calculator is lost, stolen, broken, etc. it is your responsibility to obtain a calculator to use.
 Library Reserve has TI-83/84 calculators for limited loans. The instructor can NOT lend her calculator.
- Cell phones or other devices can NOT be used as a calculator on a quiz or exam. Students can **NOT** share calculators for quizzes or exams.

BE PREPARED: Your preparation affects your and other students' ability to learn in class.

Active learning and exploration of ideas are possible when students come to class capable and prepared. Such activities are designed to present material in a more accessible, intuitive manner with hands-on participation. If students are unprepared and therefore not able to participate, an activity may fail as a demonstration of the concept it is designed to illustrate, adversely affecting everybody's opportunity to learn. **Bring required materials daily and keep up to date to be able to participate in a constructive manner to class learning activities**.

RESPECT OTHER STUDENTS' RIGHT TO LEARN in an environment that supports learning.

- Please save private conversations for before or after class so that all students can hear and pay attention during class. No private conversations or disruptive behavior in class. Students disrupting class may be asked to leave the classroom or may be dropped from the class.
- Turn off & put away cell phones & other devices before class: if your device makes noise or disrupts class, it
 interferes with other students' ability to learn; the instructor may ask you to leave. If it makes noise during a
 quiz/exam, points may be deducted from your grade or the instructor may take your paper and ask you to leave.

GRADES										
			Approx. %	COURSE GRADES						
		Points	Approx. %	Minimum percentage needed to						
Final Exam (mandatory)	150	20 -22%	guarantee the indicated grade							
Quizzes (best 6 of 8 quizzes)	90	12 -13%	A: 93% A-: 90%							
Chapter Homework (Webassign best 10 HW)		100	13 -15%	B+: 87% B: 83% B-: 80%						
Worksheets/Technology Activities / Lab Projects		60-110	8 -15%	C+: 76 % C: 68%						
Total points	700-750 points		Total 100%	D: 58% F: under 58%						

HOMEWORK: READ THE TEXTBOOK - REVIEW CHAPTER NOTES - DO ASSIGNED PROBLEMS

HOMEWORK provides practice in the skills and concepts learned in class. Just as practice is important in sports and music, practice is also essential in learning math. **Do homework with the goal of <u>understanding</u> so that you will be able to do similar problems on quizzes and exams.** Sometimes you may need to struggle though a problem until it becomes clear – keep trying and work on understanding rather than just guessing answers to earn homework points. If you have trouble with a concept or skill, come to office hours or use the tutorial center to get help.

- <u>13 homeworks @ 10 points each; total 100 points; 10 best homework grades are counted</u>; the rest are dropped Each chapter has a homework assignment to provide practice to become proficient.
- Assignment schedule will be posted on the instructors website and Webassign throughout the quarter. Submissions for each question are usually limited to 2 or 3 attempts depending on type of question. Submit homework on time. After due date/time, answer key is available online and homework can no longer be submitted for credit, but can still be viewed for study.
- The instructor will answer homework questions in class to the extent that time permits. Additional help available during office hours and in Tutorial Center S43.

QUIZZES: <u>8 quizzes @ 15 points each – best 6 quizzes count – 2 lowest quizzes are dropped - total 90 points:</u> Based closely on homework and classwork. Prepare for quizzes by doing homework and reviewing classwork. Quizzes have several purposes: (1) to provide a way for students to assess understanding before an exams; (2) to provide a way for the instructor to assess students' understanding and identify areas of difficulty; (3) to motivate students to do work on a timely basis instead of cramming for exams at the last minute; Quizzes are primarily written out answers (possibly some multiple choice). Grading depends on clarity of work, interpretations, accuracy and completeness of graphs, and explanations as well as numerical answers.

• IF YOU ARE ABSENT FOR A QUIZ: No Make-Up Quizzes – No exceptions!! If you are absent for a quiz for ANY reason, you earn a quiz grade of 0. Up to 2 quiz grades of 0 for absence can be dropped as your lowest grades. However, try to avoid quiz absences as dropping a grade of 0 will mean you can not drop some other low quiz grade.

MIDTERM EXAMS: 3 exams @ 100 points each - Bring a PARSCORE form (red & white #1712 PAR) & calculator

- Midterm exams are all or part multiple choice; exams may or may not contain some free response questions requiring you to write and show work. Instructor can NOT lend her calculator and does NOT supply parscores.
- If it improves your course grade, your lowest exam grade is replaced by the <u>percentage equivalent</u> grade on the final exam, not to exceed 100%.
- **NO MAKE-UP EXAMS.** Absence earns a grade of 0. One such grade of 0 for absence would be the lowest exam score that gets replaced by the percentage equivalent grade on the final exam. Students should try to avoid exam absences as an exam absence would prevent replacement of the grade on another midterm that had a poor grade.

FINAL EXAM: 2 hours; 150 points; mandatory ; comprehensive: includes ALL material covered during the quarter

- <u>No early/late final exams</u>; schedule is college-mandated. Plan your schedule now to be available for the final exam on that date and time. See college online final exam schedule and also page 1 of syllabus for final exam date.
- Bring a PARSCORE form (red & white #1712 PAR) and your calculator.
 Final exam is all multiple choice. Instructor can NOT lend her calculator and will NOT supply parscores.
- For final exam only, 2 pages of student's HANDWRITTEN notes permitted, 8.5 by 11 inches, 2-sided.
 Notes are collected with the final exam; instructor keeps both the notes and the final exam papers.

NOTES FOR QUIZZES & EXAMS: ONE page of student's HANDWRITTEN notes permitted for all midterm exams and guizzes: 8.5 by 11 inches, 2 sided. (TWO pages for final exam only.)

- But if your notes do not comply with requirements, they will be taken away and you will take the quiz or exam or final with NO notes.
- Notes are collected with midterm exams and quizzes and will be returned with your graded quiz/exam if you write your name on it and staple it to your quiz/exam.
- Notes for final exam are kept by instructor.

TECHNOLOGY & CLASSROOM ACTIVITIES/WORKSHEETS/LAB PROJECTS:

60 to 110 points of your grade consists of technology activities/worksheets/classroom activities/lab projects which are to be determined during the quarter. These satisfy UC/CSU requirements for computer/technology activities for this class to be transferable. Technology activities may be calculator based or may use statistical software in a computer lab during the class's regular meeting time.

- These can occur in class anytime in the quarter, often without advance notice.
- Some activities or worksheets may be done as part of the day's classwork and, if so, can not be made up if you
 are absent and miss it. If an activity or worksheet is to be worked on at home, then it must be turned in on
 time, in class at the beginning of class on its due date.
- Written explanations and conclusions based on data are a significant part of the grading on these items.
 Students should put a strong effort into writing these explanations and conclusions, in addition to striving for correct numerical work.

SCHEDULE & CHANGES : Quizzes / Exams may vary day of week – will be posted on the instructor's website. Any changes will be announced in class (and posted on the website, if possible). Because students are expected to attend daily, if you are absent for an exam or quiz, the policies above still apply even if the date of a quiz/ exam was changed.

STANDARDS OF WORK: College level work is expected ; work is graded for both accuracy and quality of work.

- Written work that is graded must be complete, neat, legible, organized, and in order. When work/explanation is requested, correct answers must be supported by correct work to receive credit; otherwise you may lose credit, even if the final answer is correct.
- Interpretation is crucial in statistics: for interpretations, conclusions or explanations, use complete sentences that explain concepts and conclusions in the context of the problem. You are expected to learn and use proper statistical wording and form. You will be taught in class what is expected when specific statistical wording and form are needed. You can lose credit for missing, incomplete or incorrect interpretations and explanations.
- For papers handed in : Write full name/class time and <u>staple</u> (no folded corners); if unstapled work is handed in and pages come apart and separate and get lost, the work is considered incomplete. Instructor is not responsible for lost pages if it is not stapled.

ESL: If English is a second language, a print (not electronic) English translation dictionary is allowed for exams/quizzes.

ACADEMIC INTEGRITY: All students are expected to exercise academic integrity throughout the quarter.

- Cheating and academic dishonesty are not tolerated and can result in a grade of 0 or F for that quiz/exam/assignment or a grade of F for the course and referral to the Dean for academic discipline. Any grade of 0 or F due to cheating or academic dishonesty will not be dropped or replaced.
- Cheating includes, but is not limited to: copying from other students, permitting other students to copy from you, plagiarism, submitting work that is not your own, using notes that do not meet permitted specifications, continuing to write/erase on exam/quiz after the permitted time has ended, changing your exam/quiz paper after it has been graded and then requesting a grading correction.
- Using any electronic device other than your approved TI calculator on a quiz or exam may be considered cheating. Sharing a calculator with another student for exam/quiz is considered cheating as work may be saved in memory

ATTENDANCE, DROPS, WITHDRAWALS: Regular attendance is important for success in math class as each day's work builds upon what came before. You are expected to attend all classes, arrive on time & stay for the entire class. Late arrival/early departures are disruptive to the class and to your classmate's learning. The instructor reserves the right to drop students who miss more than 5 classes during the quarter or who miss any classes in the first two weeks you. However the instructor may or may not perform such a drop/withdrawal.

College Policy: If the student chooses not to complete the class, it is the STUDENT'S RESPONSIBILITY to drop or withdraw by the college deadlines.

If you stop attending but do not withdraw or drop you may fail with a grade of F. See deadlines on page 1 of syllabus and on college online academic calendar; the college strictly enforces these deadlines.

- Parking is difficult. Plan extra time to avoid traffic and parking problems to avoid being late.
- Get classmates' contact information so you can get notes and information. Instructor will not repeat lectures during class, office hours, or any other time. If you are absent, read the textbook and go to the Tutorial Center first; come to office hours if you still have specific questions.
- Check website to find out about due dates or schedule changes. You are responsible for keeping up and to be aware of any schedule changes even when absent.

COMPUTER ACCESS: This class requires several computer resources explained on pages 1 and 2.

- Library West Computer Lab has computers with internet access; located in the LCW building downstairs <u>http://www.deanza.edu/library/librarywestcomputer.html</u> (408-864-8761)
- Math/Science Tutorial Center in Room S43 also has some computers available for student use.

EDUCATIONAL ACCESS:

Please see instructor during office hours to discuss your situation confidentially if you have accommodations; you should see the instructor during the first week of class or as soon as you receive approval from the appropriate support service.

For information about eligibility, support services or accommodations due to physical or learning disability see:

- Disability Support Service (DSS): <u>www.deanza.edu/dss</u> Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): www.deanza.edu/edc Location: LCW 110; (408) 864-8839
- Special Education Division:; www.deanza.edu/specialed (408) 864-8407

CLASS CANCELLATION, EMERGENCY:

If class is canceled for any reason, or if an emergency causes campus to be closed, assume that any quiz, exam or due date scheduled on that date will be rescheduled to our next class meeting. If there are other changes, I will announce them in class after classes resume. Check the website and email; if necessary and if possible, I may post a message.

IF YOU NEED HELP IN THIS MATH 10 CLASS

- MATH TUTORIAL CENTER (S-43) has FREE TUTORING for MATH 10. Drop in tutoring is available daily. Ask in the Tutorial Center about the availability of individual weekly tutoring.
- FREE ONLINE TUTORING from SMARTTHINKING.COM available in MyPortal Amount of online tutoring may be limited per student during the quarter.
- SEE INSTRUCTOR DURING OFFICE HOURS to ask questions about material you need help with.
- FIND A STUDY PARTNER OR FORM A STUDY GROUP early. Working with somebody helps you understand material better. Work consistently through the quarter. Collaboration is easy to do: use phone or email or text or chat if you can't study together in person. Find a study partner who is interested in WORKING WITH you, not somebody trying to earn their points based on your effort without putting in similar effort themselves.

• DON'T WAIT UNTIL YOU ARE DROWNING TO GET HELP.

Get help as soon as you have difficulty, while there is still time to catch up and improve! Classes taken on the quarter system move quickly; if you wait until you are behind, it will be difficult to catch up.

You probably need this class to transfer. Not doing work and/or not getting help early may endanger your transfer plans. Your transfer plans may be delayed if you don't pass Math 10.

• **PREPARE FOR EXAMS EARLY:** Students who start studying several days early are more likely to succeed on exams. It takes a couple of nights of sleep for material you study to become set in your long-term memory. If you cram the day before, you may "blank out" when trying to answer exam questions, or may not recall it quickly enough to finish in time. Check website for resources that provide additional practice for exams.

• CHECK THE WEB for helpful resources.

- Course websites contain your instructor's support materials.
- Website will contain links to practice materials for exams they will not look exactly like your exam but they will be similar to give you an idea of generally what to expect by providing practice across a broad spectrum of the skills required for the exams and will give you practice in how questions on your exam may be asked.
- Video lectures/podcasts by other instructors teaching from this textbook some students like these because they can watch them over and over to help in learning the material.
 - Video lectures/podcasts by authors Illowsky & Dean: <u>http://cnx.org/contents/suk7Knt7@7/Collaborative-Statistics-Addit#videolectures</u>
 - Check website for other possible links to the same videos
 - Video mini-lectures by Prof. Larry Green (Lake Tahoe Community College) these short videos each focus on how to solve a particular type of problem. <u>http://www.ltcconline.net/greenl/courses/201/CamtasiaStatCrunch/index.htm</u> or <u>https://www.youtube.com/playlist?list=PL3sVihI20x92nTtu04d4nx_7ShT_M4vK3</u> or go to YouTube and search for Larry Green Statistics

Math 10 Fall 2017 Tentative Schedule

There	e may be additi	onal labs or works	heets for some ch	apters that are no	t yet determined	so not listed on th	e schedule
Week	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1		25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
			Ch 1	Ch 1	Ch 1	Ch 1/2	<u> </u>
		First Day of Class		Webassgin opens today		Calculator HW Worksheet Due	
2	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct
		Ch 2	Ch 2	Ch 2	Ch 2	Ch 2	
		Ch 1 HW due in Webassign	Ch 1 Quiz			Start Baseball Project	Last Day To ADD
	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct
		Ch 3	Ch 3	Ch 3	Ch 3	Ch 3/4	
	Last Day to Drop no W	Ch 2 HW due in Webassign	Ch 2 Quiz				
4	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct
		Ch 4	Ch 4		Ch 4	Ch 4/5	
	Ch 3 HW due in Webassign	Ch 3 Quiz		EXAM 1 Ch 1, 2, 3		Last Day to Elect P/NP at A&R	
5	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct
		Ch 5	Ch 5/6	Ch 6	Ch 6	Ch 7	
		Baseball Project Due	Ch 4 HW due in Webassign	Ch 4 Quiz			
6	29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov
		Ch 7	Ch 7	Ch 7	Ch 8	Ch 8	
		Ch 4 Work- sheet due	Ch 5,6 HW due Webassign	Ch 5,6 Quiz			
7	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov
		Ch 8	Ch 8		Ch 9		
		Ch 7 HW due in Webassign		EXAM 2 Ch 4, 5, 6, 7	Ch 7 Work- sheet due	No Class Veteran's Day	
8	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
		Ch 9	Ch 9	Ch 9	Ch 9	Ch 10	
		Ch 8 HW due in Webassign	Ch 8 Quiz		Ch 8 Work- sheet due	Last Day to Withdraw W	
9	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
		Ch 10	Ch 10	Ch 10			
		Ch 9 HW due in Webassign	Ch 9 Quiz		No Class Thanksgiving	No Class Thanksgiving	
10	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec
		Ch 13	Ch 13		Ch 12	Ch 12	
		Ch 10HW due in Webassign		EXAM3 CH 8,9,10			
11	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec
		Ch 12	Ch 11	Ch 11	Ch 11	Review	
		Ch 12,13 HW due Webassign	Ch 12,13 Quiz??	Ch 12,13 Quiz??		Return Ch 12, 13 Quiz	
12	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec
**	10 000	Ch 11 HW due Webassign		10 000	FINAL EXAM 11:30am – 1:30pm	10 000	