Math 10.12 & Math 10H.12 FALL 2016 11:30 am - 12:20 pm

Elementary Statistics & Probability De Anza College 5 days: MTWThF Instructor: Roberta Bloom



Welcome to Math 10 Statistics!

We will learn to use statistical methods to analyze and interpret data and to make decisions and inferences based on data. Statistics is used in the real world in many ways that affect our daily lives, 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, and 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.

Instructor and Contact Information

Instructor: Roberta Bloom

Phone: 408-864-8591 Office: S33N email: bloomroberta@deanza.edu email is preferred

Office Hours:

Mon, Tues, Wed Thurs, Fri: 10:30-11:15

Room G1

Instructor's Websites:

https://catalyst.deanza.edu http://deanza.edu/faculty/bloomroberta/

Course outline - official list of required topics: http://ecms.deanza.edu/deptoutlinespublic.html

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, UC and SCU 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 to do the work needed to succeed. **This is a collaborative class**; you are expected to work with your classmates both in and outside of class.

Math 10H: An Honors cohort is offered in this section. If interested, see instructor during week 1 during office hours or by appointment to discuss eligibility, time, responsibilities, project and to get an add code. http://deanza.edu/honors

Materials & Resources required for this class:

- Catalyst: FREE online course management system: course notes and materials: https://catalyst.deanza.edu
- Textbook: Introductory Statistics from OpenStax: available FREE online or print book about \$35 in bookstore Links to free online textbook or downloadable pdf file: https://openstax.org/details/introductory-statistics OR https://cnx.org/contents/30189442-6998-4686-ac05-ed152b91b9de/Introductory_Statistics
- Webassign online homework system: about \$35 if purchased directly online: http://www.webassign.net
- 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 dates- deadlines are enforced by the college Last day to Add: Sat. 10/8 Last day to Drop (no W): Sun. 10/9 Last day to Elect P/NP: Fri. 10/14 Last day to Withdraw (W): Fri. 11/18 (week 8)

Final Exam: Monday 12/12: 11:30 am - 1:30 pm. This is the college mandated official final exam date/time.

Materials & Resources required for this class:

Catalyst Website: https://catalyst.deanza.edu De Anza's online course management system

Access to course materials, syllabus, schedule, announcements, assignments,

- Follow onscreen QUICK LOG IN instructions. After your first log-in, change your password.
- Only students registered in this class can login. If adding, ADD IMMEDIATELY to get Catalyst access in 24 to 48 hours.
- Need help logging into Catalyst? Use tech help links on Catalyst site for assistance directly from their support staff.
- Chapter Notes are available in Catalyst print and bring them to class to take notes.

 Chapter notes have examples and data that we use to learn in class. They provide a framework to organize your note-taking. We do many of the examples in the notes in class, but not all some are there for extra practice.

Open Website: http://deanza.edu/faculty/bloomroberta; no log-in needed; contains some (not all) course materials that are also in Catalyst; students should use Catalyst for complete resources and up to date information.

WebAssign: http://www.webassign.net Chapter homework is collected and graded using Webassign. Available on Wednesday of first week.

- Cost: under \$35 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.
- To get started, click ENTER CLASS KEY & enter key deanza 6096 9367 Follow online instructions.
 Use first & last registration name and email address exactly as in MyPortal.
 If email address in MyPortal is not correct, put correct email address into both Webassign and MyPortal.
- **Need help logging into Webassign?** Contact Webassign http://www.webassign.net/info/contact_us.html or phone their tech help number (800) 955-8275 see www.webassign.net/info/contact_us.html or phone their tech help number (800) 955-8275

Textbook: Introductory Statistics from OpenStax, by Illowsky & Dean

- free web version http://cnx.org/contents/30189442-6998-4686-ac05-ed152b91b9de/Introductory Statistics
- free pdf file of complete print version download from OpenStax site above or from link in Catalyst
- print book can be purchased at the bookstore cost under \$35 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 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.

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GRADES

		Points	Approx. %
3 Midterm Exams		300	40 -43%
Final Exam (mandatory)		150	20 -22%
Quizzes (best 6 of 8 quizzes)		90	12 -13%
Chapter Homework (Webassign best 10 HW grades)		100	13 -15%
Worksheets/Technology Activities / Lab Projects/		60-110	8 -15%
Total points (for Math 10H see page 4)	700-750 points		Total 100%

COURSE GRADES						
Mini	Minimum percentage needed to					
guarantee the indicated grade						
A:	93%	A-: 90%				
B+:	87%	B: 83% B-: 80%				
C+:	76 %	C: 68%				
D:	58%	F: under 58%				

HOMEWORK: READ THE TEXTBOOK - REVIEW CHAPTER NOTES - DO ASSIGNED PROBLEMS 13 homeworks at 10 points each; 10 best homework grades are counted; the rest are dropped; total 100 points Homework provides practice in skills and concepts learned in class. Just as practice is important in sports and music, practice is also essential in learning math. Each chapter has a homework assignment to provide practice.

- **Do homework with the goal of understanding** so that you can 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.
- Assignment schedule is in Catalyst & Webassign. Submissions for each question have limited 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 is available during office hours and in Tutorial Center S43.

QUIZZES: 8 quizzes @ 15 points each – best 6 quizzes count – 2 lowest quizzes are dropped - total 90 points:

Prepare for quizzes by doing homework and reviewing classwork. Quizzes have several purposes: (1) to enable students to assess understanding before an exam; (2) to enable instructor to assess 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.

- 1 page (8.5 by 11 inches, 2 sided) of handwritten notes are permitted for each quiz.
- 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 grades of 0 for absence can be dropped as your lowest grades.

 However, try to avoid quiz absences as dropping a grade of 0 means you can not drop some other low quiz grade.

MIDTERM EXAMS: 3 exams @ 100 points each - Bring calculator and red & white ParScore form F-1712-PAR-L 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. Your instructor can not lend her calculator and will not supply parscores.

- 1 page (8.5 by 11 inches, 2 sided) of handwritten notes are permitted for each exam.
- If it improves your course grade, your lowest exam grade is replaced by the <u>percentage equivalent</u> grade on the final exam (2/3 of final exam grade), 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; an exam absence would therefore 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

- No early/late final exams; schedule is college-mandated. See college online final exam schedule and page 1 of syllabus for final exam date. Plan your schedule now to be available for the final exam on that date and time.
- Bring your calculator and red & white ParScore form F-1712-PAR-L. Final exam is all multiple choice.
- 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.

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REPLACEMENT POLICY FOR GRADES: If it improves your course grade, your lowest exam grade is replaced by the percentage equivalent grade on the final exam (2/3 of final exam grade), not to exceed 100%. This includes an exam grade of 0 for absence. If your total homework grade out of 100 points is lower than your lowest exam grade, the homework grade can be replaced according to this policy instead of a low exam, if it is more advantageous to your grade.

TECHNOLOGY & CLASSROOM ACTIVITIES/WORKSHEETS/LAB PROJECTS:

80 to 130 points of your grade consists of technology activities/worksheets/classroom activities/lab projects 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.

SCHEDULE & CHANGES: Quizzes / Exams may vary day of week – dates listed in Catalyst. Any changes will be announced in class (and posted on Catalyst, 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.

GRADES FOR HONORS MATH 10H:

Enrollment in honors Math 10H does not earn a higher grade than in Math 10. Math 10H students are required to complete all work required in Math 10 and to do the additional honors work. Once you commit to the Honors section, you will be expected to complete the extra honors work; you can not withdraw and reenroll in regular Math 10 after the college drop and add deadlines. The Honors project is worth 10% of the total points for the quarter; thus honor students' grades are determined using

total points earned including points earned on honors project 110% of the total points for Math 10

NOTE: This means that if an honor student does not complete or do satisfactory work on the honor project, the final grade would be lower than if not enrolled in Math 10H, and is unlikely to exceed A-.

To determine eligibility for Math 10H: visit http://deanza.edu/honors or contact dahonors@deanza.edu with your name, SID, and the Honors course you are interested in taking.

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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 Catalyst 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.

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

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 http://www.deanza.edu/library/librarywestcomputer.html (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): www.deanza.edu/dss 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.

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IF YOU NEED HELP IN MATH 10

- MATH TUTORIAL CENTER (S-43) has FREE DROP IN TUTORING for MATH 10 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: use phone, email, 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!

 On the quarter system, classes move quickly; if you wait until you are behind, it is difficult to catch up. You probably need this class to transfer. Get help early so you don't endanger your transfer plans; your transfer plans may be delayed if you don't pass Math 10.
- PREPARE FOR EXAMS EARLY: Check Catalyst for additional practice resources for exams. 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 THE WEB for helpful resources.
 - Course websites contain your instructor's support materials.
 - Catalyst site 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.
 - Half hour chapter video lectures/podcasts by authors Illowsky & Dean: http://cnx.org/contents/suk7Knt7@7/Collaborative-Statistics-Addit#videolectures
 - Mini video lectures by Prof. Larry Green at Lake Tahoe Community College These short videos each focus on how to solve a particular type of problem. http://www.ltcconline.net/greenl/courses/201/CamtasiaStatCrunch/index.htm or https://www.youtube.com/playlist?list=PL3sVihI20x92nTtu04d4nx_7ShT_M4vK3

or go to YouTube and search for Larry Green Statistics

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MATH 10 TENTATIVE SCHEDULE FALL 2016

Due dates for worksheets/projects/labs/technology activities are not shown on this schedule but will be posted in Catalyst as they are determined. Webassign Homework is due online at 9pm on the indicated due date.

Odlaryst	Mon	Tue	work is due online at Wed	Thu	Fri
Week	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
1		Ch 1	Ch 1	Ch 1	Ch 1/Ch 2
			Starting Thu	ator Every Day	
Week	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct
2	Ch 2	Ch 2	Ch 2	Ch 2	Ch 2
	CH 1 HW due Webassign		QUIZ: Ch 1	Sat 10/8: Last Date 10/9: La	,
Week	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct
3	Ch 3	Ch 3	Ch 3	Ch 3	CH 3/ Ch 4?
3	Ch 2 HW due		CH 3	Ch 3	Last Day to
	Webassign	QUIZ: Ch 2			request P/NP
Week	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct
4	Ch 4	Ch 4	Ch 4	EXAM: Ch 1,2,3	Ch 5
	Ch 3 HW due Webassign	QUIZ: Ch 3			
Week	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct
5	Ch 5	Ch 6	Ch 6	C 6	Ch 7
	Ch 4 HW due Webassign	QUIZ: Ch 4		Ch 5 HW due Webassign	
Week	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov
6	Ch 7	Ch 7	Ch 7	Ch 8	Ch 8
	Ch 6 HW due Webassign	QUIZ: Ch 5 & 6		Ch 7 HW due Webassign	QUIZ: Ch 7 (with 5 & 6)
Week	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov
7	Ch 8	Ch 8	EXAM: Ch 4,5,6,7	CH 9	College Closed Veteran's Day
Week	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
8	Ch 9	Ch 9	Ch 9	Ch 9/ Ch 10	Ch 10
Week	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
9	Ch 10	Ch 10	Ch 10 / Ch 13?	College Closed	College Closed
	Ch 9 HW due Webassign	QUIZ: Ch 9		Thanksgiving Holiday	Thanksgiving Holiday
Week	28-Nov	29-Nov	30-Nov	1-Dec	2-Dec
10	Ch 13	*Ch 13/Ch 12	EXAM: Ch 8,9,10	*Ch 12	*Ch 12
	Ch 10 HW due Webassign		may revise schedule & revisit Ch 13 on 11/29 or 12/1.		Ch 13 HW due Webassign
Week	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec
11	*Ch 12	Ch 11	Ch 11	Ch 11	Last day of Class/ Catch Up Day
	Ch 12 HW due Webassign	QUIZ: Ch 13 & 12	QUIZ Ch 13 & 12? (Possible date?)		Ch 11 HW due Webassign
	12-Dec	(likely date) 13-Dec	14-Dec	15-Dec	16-Dec
Final Exam Week	FINAL EXAM MONDAY 12/12 11:30am -1:30pm	13-060	14-060	13-060	10-060

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