

Math 10.03	Elementary Statistics & Probability	De Anza College	SUMMER 2016
10:00 am – 12:15 pm	Instructor: Roberta Bloom	Phone: 408-864-8591	
4 days: MTWTh	email: bloomroberta@deanza.edu <i>email is preferred</i>		
Instructor's Websites: https://catalyst.deanza.edu AND http://deanza.edu/faculty/bloomroberta/			

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.

Student Learning Outcomes:

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, 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 - required topics: <http://ecms.deanza.edu/deptoutlinespublic.html>

Welcome to Math 10 Statistics! We will learn basic statistical methods that are 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.

Math 10 is a demanding, but rewarding class. To transfer to 4-year colleges, the four year colleges require that Math 10 must cover a lot of material. In our short summer quarter, we move at a rapid pace to cover this work. This class requires daily attendance and significant additional time for homework, study, and projects outside of class. Review your schedule now to plan your time for the work needed for this class.

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:

- **Catalyst** : free online course management system: course notes and materials: <https://catalyst.deanza.edu>
- **Textbook Introductory Statistics from OpenStax**, by Illowsky, B. and Dean, S.
 - ◆ Available FREE online <https://openstaxcollege.org/textbooks/introductory-statistics/get> or at <http://cnx.org/content/col11562/latest>; links to download pdf file are posted in Catalyst.
 - ◆ Available in print under \$40 in the De Anza College bookstore <http://books.deanza.edu/home.aspx> .
- **Webassign** online homework system: about \$35 if purchased directly online: <http://www.webassign.net>
To get started, click **I HAVE A CLASS KEY** Enter key **deanza 1455 3907** and submit. (see page 4 for more info)
- **TI-83+ or TI-84+ calculator** Needed by Wed 6/29. Purchase at bookstore or other stores (check prices first). Bookstore may have a limited number of calculators available for rent. Library lends a limited number of calculators for a few hours at a time. See page 4 for more info, or for TI-89 or TI-Nspire.
- **Chapter Notes** – posted in Catalyst – download, print & bring to class as indicated in schedule in Catalyst.
- **Bring To Class Daily:** calculator & 4 spare AAA batteries, notes for current chapter, ruler, small stapler
- **Bring To Class for Exams:** photo ID, calculator, #2 pencil , eraser, scantron (green #882-E or brown#2052)

College Schedule & Deadlines are enforced by the college: Last day to Add: 7/3.

Last day to Drop (no W): 7/4 Last day to drop with refund: 6/29 Last day to Withdraw with W: 7/26

Check in MyPortal or online academic calendar to confirm these dates are correct.

Final Exam: Thursday 8/4 during our regular class time.

Read this entire syllabus to be familiar with the class and policies and grading.

If the syllabus does not answer your question, ask the instructor. Syllabus is posted on online at:

<http://deanza.edu/faculty/bloomroberta> <https://catalyst.deanza.edu> www.deanza.edu/psme

GRADING SUMMARY:

GRADES are based primarily on exams & quizzes	Points	Approx. %	COURSE GRADES		
2 Midterm Exams	200	30-33%	Minimum percentage needed to <i>guarantee</i> the indicated grade		
Final Exam	150	23-25%			
Quizzes: <i>best 5 of 7 quizzes</i>	60	9-10%	A: 93%	A-: 90%	
Chapter Homework: <i>10 highest grades, online</i>	100	15-17%	B+: 87%	B: 83%	B-: 80%
2 Projects (50 pts + 25 pts)	75	11-13%	C+: 76 %	C: 68%	
Worksheets	30-70	5-11%	D: 58%		
Total points for quarter	615-655 points		F: under 58%		

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

Homework provides practice in the skills and concepts we learn in class. Just as practice is important in sports and music, practice is also essential in learning math. **Do homework with the goal of understanding** 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.

12 or 13 homeworks at 10 points each; 10 best homeworks are counted; the rest are dropped; total 100 points

- **Assignment schedule is in Catalyst & Webassign.** For online homework, submissions for each question is usually limited to 2 attempts. Submit homework on time. After due date/time, answer key is available online and homework can no longer be submitted for credit, but is still available to do for practice.
- The instructor will answer homework questions in class to the extent that time permits. Tutorial Center S43 offers free tutoring help.

QUIZZES: 7 quizzes - 12 points each – best 5 quizzes are counted – total 60 points:

Based closely on homework & classwork. Prepare for quizzes by doing homework and reviewing classwork. Purpose of quizzes: (1) for students to assess understanding before exams; (2) for the instructor assess understanding and identify areas of difficulty; (3) to motivate students to complete work on a timely basis. 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.

- **NO MAKE-UP QUIZZES.** If you are absent for a quiz for ANY reason, you earn a quiz grade of 0. *Quiz grade of 0 for absence can be dropped as one of your two lowest quiz grades.*

MIDTERM EXAMS: 2 exams - 100 points each - Bring scantron (green #882-E or brown #2052) , calculator, photo ID

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 she does NOT have extra scantrons.

- **NO MAKE-UP EXAMS.** Absence earns a grade of 0. *One grade of 0 for absence would be the lowest exam score and would be replaced under the “replacement policy” by the percentage equivalent grade on the final exam; 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

- **No early/late final exams:** Plan your schedule now to be available for the final exam during class on Thurs Aug 4.
- **Bring scantron (green #882-E or brown #2052) and your calculator and a photo ID.** Final exam is all multiple choice. Instructor can NOT lend her calculator and will NOT supply scantrons.
- 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 quizzes: 8.5 by 11 inches, 2 sided. (TWO pages for final exam only.) If exam or quiz notes do not comply with requirements, they will be taken away and the student 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.

“REPLACEMENT POLICY” for grades - end of quarter -based on the final exam grade:

The percent equivalent grade on the final exam will be compared to the percentage grades on Midterm Exam 1, Midterm Exam 2, Homework Total, and Chapter 2 Project. If it is advantageous to the grade, ONE of these items will be replaced on a percentage equivalent basis by the grade on the final exam. The instructor’s grading spreadsheet will automatically do the most advantageous replacement, but only if it will improve the grade.

PROJECTS AND WORKSHEETS: 105 to 145 points of the grade. Must be turned in on time; will not be accepted late.

You can turn in it early if you want. Worksheets are to be determined during the quarter. Two technology based projects (50 points and 25 points, respectively) use the graphing calculator and meet UC/CSU requirements for technology activities for Math 10 to be transferable.

- Some worksheets may be done as part of a day's classwork and, if so, can not be made up if you are absent and miss it. These can occur in class anytime in the quarter, without advance notice.
- If a project or worksheet is to be worked on outside of class, then it must be turned in on time, in class at the beginning of class (first five minutes) on its due date. If you are absent when a group project is started in class, you may need to do it alone without a group or partner; students can not join a group working on a project if not in class to contribute to the group’s work starting the project.

SCHEDULE & CHANGES : The instructor may change dates of quizzes, exams, due dates of worksheets, homework or projects as needed. Any schedule 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 or miss a due date, the policies above still apply even if the date of a quiz/exam or a due date was changed.

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.

RESPECT OTHER STUDENTS’ RIGHT TO LEARN IN AN ENVIRONMENT THAT SUPPORTS LEARNING.

- **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 it makes noise or disrupts class, the instructor may ask you to leave. Each time it makes noise during a quiz/exam, points may be deducted from your grade.
- If it makes noise repeatedly during a quiz/ exam, the instructor may take your paper and ask you to leave.

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

- **Written work must be complete, neat, legible, organized, and in order.** If 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:** when asked for interpretations, conclusions or explanations, use complete sentences to explain concepts and conclusions in the context of the problem. You are expected to learn and use proper statistical wording. You will be taught in class what is expected when specific statistical wording or form are needed. You can lose credit for missing, incomplete, or incorrect interpretations/ explanations.
- **For papers handed in :** Write full name/class time and staple (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.

CATALYST WEBSITE: <https://catalyst.deanza.edu> ,

- 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.

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: Chapter homework is collected and graded using Webassign.

- <http://www.webassign.net> To get started, click **I HAVE A CLASS KEY**. Enter key **deanza** **1455** **3907** into the boxes. Follow online instructions. **First & last name: use your official registration name exactly 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 in both Webassign and MyPortal .)
- Cost: about \$35 for the quarter; pay online with debit or credit card. FREE for 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?** Call or contact Webassign Tech Help: (800) 955- 8275 http://www.webassign.net/info/contact_us.html or http://www.webassign.net/user_support/student/index.html See www.webassign.net for their help hours.

COMPUTER ACCESS: Library Computer Lab has computers with internet access. Math/Science Tutorial Center in Room S43 also has some computers available for student use. <http://www.deanza.edu/library/librarywestcomputer.html>

CALCULATOR REQUIRED: TI-83, TI-83+, or TI-84+ recommended. We use them every day in class.

They have statistics “apps” to make tedious calculations easy and fast to do.

- Bookstore may have a limited number of TI-84+ calculators for rent.
- TI-Nspire acceptable. TI-89 acceptable but NOT recommended - it is harder to use for Math 10 than TI-83/84.
- If using TI-89 or TI-Nspire, the student must take responsibility for getting programs & 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.**

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 3 classes during the quarter or who miss any classes in the first week. 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 website; the college strictly enforces these deadlines.*

- You are responsible for keeping up and to be aware of schedule changes even when absent. Get classmates' contact information so you can get notes and information. Check Catalyst to find out about due dates or schedule changes.
- If you are absent, read the textbook, go to the Tutorial Center, watch videos.

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.

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.

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

IF YOU NEED HELP IN THIS CLASS:

- **MATH TUTORIAL CENTER (S-43) : FREE DROP-IN TUTORING for MATH 10.**
Ask in the Tutorial Center about the availability of individual weekly tutoring.
- **FREE ONLINE TUTORING from SMARTTHINKING.COM** - available in MyPortal
The amount of online tutoring may be limited per student during the quarter.
- **ASK QUESTIONS** in class as appropriate, or before or after class or during break
- **FIND A STUDY PARTNER OR FORM A STUDY GROUP** early. Working with somebody helps you understand material better. Work together consistently throughout the quarter.
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!**
Summer classes move quickly; if you wait until you are behind, it will be difficult to catch up.
- **CHECK THE WEB for helpful resources.**
 - ◆ **Course websites contain instructor's support materials. There are also links to exam practice materials;** these will not look exactly like your exam but they will provide practice in the skills required for the exams and in how questions on your exam may be asked in order to give you an idea of generally what to expect.
 - ◆ **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:**
<http://itunes.apple.com/us/itunes-u/math-10-elementary-statistics/id431446414> or
<http://cnx.org/content/m18746/latest/#videolectures>
 - **Short video mini-lectures by Prof. Larry Green at Lake Tahoe Community College focusing on how to solve particular types of problems.**
<http://www.ltconline.net/green/courses/201/CamtasiaStatCrunch/index.htm>
or https://www.youtube.com/channel/UCzuysnkCt_bLhJkqFchj6TA/playlists
or go to YouTube and search for Larry Green Statistics

Math 10.03 & Math 10.05: TENTATIVE CALENDAR SUMMER 2016

This schedule is tentative and may change during the quarter.

All projects are due at the start of class (first 5 minutes) on the due date.

All Webassign chapter homeworks are due online before 9pm on date indicated; answer key opens at 9pm.

Ch. 13 HW due date is not listed on this calendar - to be determined based on when we cover the material

Worksheets shown are tentative and may be changed according to the flow of work in this class.

Although not on the schedule, additional worksheets may be assigned for chapters 11, 12, or 13 if time permits.

Students are responsible for keeping track of any schedule changes. This initial tentative calendar will not be updated during the quarter – check the Weekly Outline Catalyst for up-to-date information.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
JUNE	27 Ch. 1 Intro Survey Worksheet	28 Ch. 1/ Start Ch. 2? Ch. 1 HW due 9pm	29 Ch. 2 QUIZ Ch. 1	30 Ch. 2 Start Ch. 2 Project
JULY	4 NO CLASS Independence Day Ch. 2 HW Due 9pm	5 Ch. 3 QUIZ Ch. 2	6 Ch. 3 Ch. 3 HW Due 9pm	7 EXAM Ch. 1,2,3 Start Ch.4
JULY	11 Ch. 4/ Ch. 6 Worksheet Ch. 4 Ch. 4 HW Due 9pm	12 Ch. 6 QUIZ Ch. 4 Tues or Wed – to be announced	13 Ch. 5 / Start Ch. 7? Ch. 6 HW Due 9pm	14 Ch. 7 QUIZ Ch. 6 Ch. 2 Project Due
JULY	18 Ch. 7/Ch. 8 Start Worksheet Ch. 7 Ch 5 & Ch 7 HW Due	19 Ch. 8 QUIZ Ch. 7 (draws on Ch. 5, 6, 7)	20 Ch.8/ Start Ch. 9? Worksheet Ch. 8 Ch. 8 HW Due 9pm	21 EXAM Ch. 4,5,6,7,8 Ch. 9
JULY	25 Ch. 9 Worksheet Ch. 7 Due	26 Ch. 9/10 Start Ch. 9 Project	27 Ch. 10 QUIZ Ch. 9	28 Ch. 10 <i>If we finish Ch. 10 early we may do Ch. 13 today</i> Ch. 10 HW Due SUNDAY 7/31 9pm
AUG	1 Ch. 12 QUIZ Ch. 10	2 Ch. 11 Ch 9 Project Due Ch. 12 HW Due 9pm	3 Ch. 13 Ch. 11 HW Due 9pm	4 FINAL EXAM Chapters 1-13

In each chapter we cover ALL material unless noted below:

- **Chapter 2:** We cover everything *except* frequency polygons.
- **Chapter 4:** We cover general discrete distributions, expected value, and the binomial distribution.
(We do not cover geometric, Poisson, or hypergeometric distributions.)
- **Chapter 5:** We cover the concepts of continuous distributions and the exponential distribution.
(We do not cover uniform distribution.)
- **Chapter 7:** We cover Central Limit Theorem for Means (Averages) and for Proportions.
Central Limit Theorem for Means is in both the textbook and the chapter notes.
Central Limit Theorem for Proportions is in the chapter notes only but not in the textbook.
(We do not cover Central Limit Theorem for Sums.)
- **Chapter 11:** We cover Test of Goodness of Fit and Test of Independence.
(We do not cover tests for the standard deviation or variance.)