Syllabus

Math 10.03, CRN 01210, Elementary Statistics, Spring 2016

8:30 – 9:20 AM, M-F (5 days a week), Room S45

Instructor: Rani Fischer email: fischerrani@fhda.edu

Office Hours: 8-8:30 AM, or by appointment after 10:30AM

Math Prerequisite: Completion of Intermediate Algebra Math 114 with grade of C or better; or qualifying score on Intermediate Algebra Placement Test within past calendar year, or equivalent placement.

English Advisory: English Writing 100 & Reading 100 (or Language Arts 100), or ESL 172 & 173. **Although this is a Math course, English reading comprehension and writing are very important in Math 10.**

Statistics is a demanding but rewarding class. This class requires daily attendance and a minimum of 10 hours of study each week outside of class.

To transfer to 4-year colleges, Math 10 is required to cover a lot of material, so moves at a rapid pace. At De Anza and *all* colleges, each credit unit represents 1 hour in class + at least 2 hours of study weekly outside of class. Thus a 5 credit class adds up to 15 hours total, or more, each week.

If you don't have time or can't commit to attend daily *and* do the work outside of class, then you should plan to take this class in another quarter when your schedule permits you to commit the time and effort to succeed.

Student Learning Outcomes:

- \cdot 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.
- \cdot Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
- · 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 of required topics: http://ecms.deanza.edu/outlineprogresspublic.html?catalogID=2175

This class requires use of

- · Course Studio for Math10.03 found at MyPortal online
- · online homework system: Webassign (roughly \$30): http://www.webassign.net. I will give you a "Class Key" which is a number you will need to either sign up for the trial period or buy right away.
- textbook: Collaborative Statistics by Illowsky & Dean, 2013 (free online; under \$40 hardcopy) https://www.openstaxcollege.org/textbooks/introductory-statistics
- · TI-83+ or TI-84+ calculator (price varies shop around: approx. \$90 -\$120)

· Statistical Software Minitab (used in class in computer lab for free)

Bring to class daily: CALCULATOR & 4 spare AAA batteries, RULER, SMALL STAPLER **COLLEGE SCHEDULE & DEADLINES** are enforced by the college.

Add: April 16

Drop with no record of grade: Mon. April 17

Elect P/NP: Fri. April 29

Withdraw with W: Fri. May 27

Final Exam: Wednesday, June 22, 7-9 AM. Plan accordingly to be there on that college mandated official final exam date. Otherwise, email me to arrange an alternative time.

Course Studio is the webpage where you will find announcements, worksheets, schedule, and this syllabus. Log on to MyPortal for Foothill/De Anza College.

Webassign: http://www.webassign.net

Most homework is collected and graded using Webassign.

To get started, click "I HAVE A CLASS KEY". Fill in the boxes with key "deanza 0685 1694" submit and 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.)

- · Webassign for this course is available as of Thursday during the first week of the quarter.
- · Cost: is roughly \$30 for the quarter; pay online with a debit or credit card. FREE during first 2 weeks of the quarter only; during week 3 you will be required to pay.

· Need help logging into Webassign?

1) Contact Webassign Tech Help: (800) 955- 8275 http://www.webassign.net/info/contact_us.html http://www.webassign.net/user_support/student/index.html Mon.—Thurs. 6am—7pm. PT; Fri. 6am—5pm PT; Sun. 8am—5pm PT 2) OR See the instructor during office hours.

Calculator Required Every Day: TI-83, TI-83+, or TI-84+

- The above calculators have the required statistics programs. Instructor demonstrates their use in class.
- · If your calculator is lost, stolen, or broken, etc. it is your responsibility to obtain a calculator to use.

The library has TI-83/84 calculators for limited loans; you need a DASB card to borrow one.

- · TI-89 is acceptable but NOT recommended it is harder to use for this class than TI-83/84. If using a TI-89, you must take sole responsibility for downloading the Statistics List Editor programs onto your calculator via TI website using your own cable and for learning on your own how to use it for this class.
- · Cell phones or other devices can NOT be used as a calculator on a quiz or exam.
- · Students can NOT share calculators for guizzes or exams. The instructor can NOT lend her calculator.

COMPUTERS AND WEBSITE: This class requires several online computer resources Computers with internet access are available in the Library West Computer Lab 408-864-8850 or http://www.deanza.edu/library/librarywestcomputer.htmltogetcomputer lab schedule

GRADES are based primarily on exams

	% of Grade
3 Midterm Exams	40%
Final Exam (mandatory) Wed. June 22, 7 AM	20%
Quizzes 4, best 3 of 4	10%
Mini Quizzes 6, best 4 of 6	5%
Homework, best 10 (of 12 or 13)	15%
Worksheets/Technology/ Lab Activities	10%

COURSE GRADES:

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

- · 12 or 13 homeworks; 10 best homeworks are counted; the rest are dropped
- · For online homework, submissions for each question are limited to 2 attempts (sometimes more). Submit homework on time. After due date/time, answer key is available online & homework can no longer be submitted for credit, but is still available to do for practice.
- · I will answer homework questions in class to the extent that time permits. Additional help available during office hours and in Tutorial Center S43.

QUIZZES: Based closely on homework & classwork. Do homework completely & pay attention in class to prepare for quizzes. Quizzes provide a way for you to assess understanding before an exam; there is a quiz for most chapters.

 \cdot 4 quizzes – best 3 of 4 - written quizzes taken in class: Ch 1&2, 2&3, 5&6, 9

Grading depends on clarity of work, interpretations, accuracy and completeness of graphs, and explanations as well as numerical answers. ONE page of student's own HANDWRITTEN notes permitted, 8.5 by 11 inches, 2 sided. Notes are collected with quiz; you will get them back if you bring a small stapler & staple them to your quiz.

· 6 mini-quizzes - best 4 of 6

Ch 4, 7, 8, 10, 11, 12: If online, mini-quizzes are open book/notes, timed with ONLY ONE submission permitted. You must finish it in one timed session once you start. Online quizzes open several days before due to allow flexibility in planning your time. You must be well prepared to complete an online quiz in the allotted time. The instructor may give some mini-quizzes written in-class rather than online. IF a mini-quiz is given as a written in class instead of online, ONE page of HANDWRITTEN notes is permitted, 8.5 by 11 inches, 2 sided.

• **NO MAKE-UP QUIZZES.** If for ANY reason you are absent for an in-class quiz or do not submit an online quiz before closing date/time, you earn a quiz grade of 0. Your lowest regular quiz grade and two lowest

mini-quiz grades are dropped. Quiz grades of 0 for absence or for non-submission can be dropped as the lowest quiz grades; such drops are limited to 1 regular quiz and 2 mini-quizzes.

MIDTERM EXAMS:bring calculator

- · ONE page of student's HANDWRITTEN notes permitted, 8.5 by 11 inches, 2 sided. Notes are collected with exam.
- · NO MAKE-UP EXAMS. Absence earns a grade of 0.
- *NOTE: If advantageous, lowest exam grade is replaced by the percentage equivalent grade on the final exam. Exam absences earn a grade of 0; one such grade of 0 for absence would be the lowest exam score replaced by the percentage equivalent grade on the final exam.

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

- · Final Exam Wed. June 22, 7-9 am. If this time does not work for you, please arrange another time with me on email.
- · 1 page 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.
- · If you miss the final exam without contacting the instructor, you will receive an F for the course.

More about QUIZZES & EXAMS:

Schedule & Schedule Changes Quizzes and Exams vary day of week. I will try to tell you ahead of time when they will happen in class. Students are expected to attend class daily. If you are absent for an exam or quiz, you must deal with it as per stated policies.

Notes: If your notes for in-class quizzes, midterm or final exams do not comply with requirements for notes, your notes will be taken away and you will take the quiz or exam with NO notes. If you take the exam or quiz using notes that do not comply with requirements, it may be considered cheating and would be subject to consequences.

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

Practice for Exams: Many students may need more practice than only doing Webassign homework. Additional practice problems are available in the textbook - you should do them!

TECHNOLOGY & CLASSROOM ACTIVITIES/WORKSHEETS/LABS consist of technology activities/worksheets/classroom activities to be determined during the quarter.

- These can occur in class anytime in the quarter, often without advance notice. Activities may be done as part of the day's classwork and, if so, cannot 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.
- · These include computer/technology activities or labs required by UC/CSU for this class to be transferable.

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. You may lose credit, even if the final answer is correct: if the instructor can't read/understand your work; if details, work, or interpretations are missing; if work is incorrect or not consistent with answer; if work is not logically presented in an understandable form.
- · Interpretation is crucial in statistics: when interpretations, conclusions or explanations are asked for, use complete sentences that explain concepts and conclusions in the context of the problem. It is expected that you will learn and use proper statistical wording and form for interpretations, conclusions or explanations.
- For papers handed in: Show your full name/class time and staple (no folded corners); otherwise they may not be accepted or you may not receive credit; if pages of your unstapled work come apart, it is considered incomplete.

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.

BE PREPARED: Your preparation affects your and other students' ability to learn in class. Bring required materials and keep up to date daily so that you are prepared to participate in a constructive manner to hands-on class learning activities. Active learning and exploration of ideas are possible when students come to class capable and prepared. If students are unprepared, an activity may fail as a demonstration of the concept it is designed to illustrate, adversely affecting everybody's opportunity to learn.

ATTENDANCE, DROPS, WITHDRAWALS: You are expected to attend all classes, arrive on time & stay for the entire class. Regular attendance is essential for success in math class. Late arrival/early departures are disruptive.

- \cdot You may be dropped by the instructor if you miss any classes in the first two weeks.
- · The instructor reserves the right to drop/withdraw students who are absent, late, or leave early (or any combination) more than 5 times during the quarter. However the instructor may or may not perform such a drop/withdrawal. Take responsibility to do it yourself if you need to drop or withdraw.
- · College Policy: If the student chooses not to complete the class, it is solely the STUDENT'S RESPONSIBILITY to drop/ withdraw by the college deadlines. If you stop attending but do not withdraw, you may fail with a grade of F. Check college schedule to confirm deadlines shown in this syllabus.

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.
- $\cdot \ Cheating includes, but is not limited to: copying from other students, permitting other students to copy from you, plagiarism, submitting work that is not your own, using notes that do not meet permitted$

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.

 \cdot 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.

EDUCATIONAL ACCESS: For information/ questions about eligibility, support services or accommodations due to disability (physical or learning disability) see below. Also, please see instructor to discuss your situation.

- · Disability Support Service (DSS): Student Services Building (408) 864-8753; TTY (408) 864-8748
- · Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864-8839
- · Special Education Division: 864-8407; www.deanza.edu/specialed

ABSENCE & PROMPTNESS: If you are absent/late repeatedly, you will find it difficult to keep up

- · **Arrive on time** Plan extra time to avoid traffic and parking problems.
- · 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, etc.
- · 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; then come to office hours if you still have specific questions.
- · If on rare occasions, you unavoidably arrive late or must leave early, sit near the door and do not disturb class. AFTER CLASS, tell the instructor you were late and pick up any handouts or papers returned at the start of class.

CLASS CANCELLATION, EMERGENCY:

If class is canceled for any reason, or if an emergency causes campus to be closed, as sume 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 your email to see if I have posted a message.

STATISTICS IS DIFFERENT FROM OTHER MATH CLASSES

Math 10 is a college level class - reflected in the sophistication of ideas and expectations for the course. Everything you learn in statistics class is relevant on a personal level to your everyday life and professional or educational goals. Decisions that affect your daily life are made using techniques we learn in this class. Statistical methods are used to determine the safety of the car you drive, safety/ effectiveness of medical treatments, to analyze educational programs, to shape public policy, to schedule TV programs, and in sports. You read and hear statistics in the media every day. Data is collected from you daily in our electronic world. Examples and problems are drawn from real life situations – most problems are "word problems" giving a context to the data. Using critical thinking, reading, and communication skills to understand, interpret and explain results is as important as doing calculations. Answers require explanation to make sense to others and to interpret w hat the calculations tell you. Attention to detail is very important.

Statisticians use computer technology to work with data. We may use professional statistical software. You will use your calculator as your own personal "statistics computer" to analyze data and carry out statistical tests, using it in class, at home, and on exams and quizzes. You will find that you will depend

heavily on technology in studying modern statistics. Your critical thinking skills are important in deciding how to use the technology appropriately and to interpret results of calculations performed by technology.

IF YOU NEED HELP IN THIS MATH 10 CLASS

For many of you, this may be your first college level math class, and college level standards apply. The ideas are more sophisticated and complicated, and we move more quickly through material than you did in your prerequisite math classes. Expectations in this college level math class may be higher than in your prerequisite math classes. You will need to read and rely on the textbook and the instructor's web notes and many available resources, in addition to learning the material as covered in class.

- CHECK MATH TUTORIAL CENTER (S-43) for FREE INDIVIDUAL, DROP-IN or GROUP TUTORING.

 Availability of free tutoring is expected but not guaranteed depends on availability of tutors & funding SEE INSTRUCTOR DURING OFFICE HOURS to ask questions about material you are having difficulty with.
- FIND A STUDY PARTNER OR FORM A STUDY GROUP early. Work consistently through the quarter. Working with somebody helps you understand material better. Work with a partner by phone or email if you can't study together in person. Work together on campus in the tutorial center or in a study room in the library. 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.

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.

If you wait until you are behind, it will be difficult to catch up. Classes taken on the quarter system move quickly.

• PREPARE FOR EXAMS EARLY: Students who start studying several days early and try sample exams are more likely to succeed in this course. 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.

o Exam/Quiz Practices (Prof. Bloom): http://faculty.deanza.edu/bloomroberta/stories/storyReader\$107

Practice exams at this site do not correspond to the same chapter order as our midterm exams for this class.

· CHECK THE WEB for helpful resources.

o Course Studio for Math10.03: announcements, worksheets, instructions, dates o Webassign: http://www.webassign.net (homework, textbook chapters, chapter videos) Math 10 open website: http://faculty.deanza.edu/bloomroberta/ contains useful info o Video lectures/podcasts by authors Illowsky & Dean: o Video mini-lectures/podcasts by Prof. Larry Green at Lake Tahoe Community College: http://cnx.org/content/m18746/latest/#videolectures http://www.ltcconline.net/greenl/courses/201/CamtasiaStatCrunch/index.htm