

# Math 10 (12:30-1:20 M-F) – Statistics - Syllabus

Spring 2018

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<b>Phone</b>	408-864-5382 (for voice messages only, as I'm unlikely to be in my office)
<b>Office Hours</b>	Monday – Thursday 9:50 – 10:20 a.m. and 1:30 – 2:00 p.m. in the UPSTAIRS LOBBY of MLC; or by appointment

## Required Materials:

- Textbook: **Inferential Statistics and Probability** by Mo Geraghty (free and online)
- A scientific calculator. A graphing calculator is fine as well. Please note that cell phone calculators will not be allowed on exams.
- Access to computer outside of class. We will be using the computer lab and Minitab (software). Also, you will need an e-mail address and access to the Internet.

**Reading and Writing:** Statistics is a concept-heavy subject. While we will do some computations and calculations this quarter by hand, we will mostly use technology. The essence of statistics lies in framing a problem in statistical language, collecting and processing data, and interpreting the meaning of results in the context of the original problem. This makes it very different from algebra! You cannot hope to do well in statistics without a clear understanding of statistical concepts. Hence, reading the textbook is essential to this class. Read the appropriate chapters before class and the lecture will make much more sense to you. On labs and exams, you will also be graded on your writing since you will need to explain your results in the context of the problem very often. Practice this carefully and deliberately on your homework, and ask questions during lecture and lab if you don't understand a concept or why an answer was expressed the way it was.

**Homework:** Homework is essential in any math class. You cannot expect to pass the class without putting consistent effort into homework and review. Prioritize learning through disciplined practice and you will reap the benefits. Completed homework must be turned in by the due date (see calendar), but should be worked on daily. Homework assignments will be shared electronically. There is no credit for late homework. If you cannot come to class on the day that homework is due, send it with a classmate or email it to me by the start of class time.

**Group Work:** You will do group work in class from time to time. You need to be present to participate and it must be turned in on time to receive credit.

**Entrance Cards:** These will consist of a problem similar to the previous days' material, and may be posted at start of class on any day! They will be unannounced and graded. Notes will be allowed on entrance cards. Missed entrance cards cannot be made up. *Please keep several neatly cut half sheets of paper ready in your binder for when they are given. You will lose points for turning in untidy sheets of paper.*

**Exams:** Two one-hour exams will be given in class. The exams will be closed notes, but you may use your calculator. There will be no make-ups for exams (before or after). Please see the calendar for dates. No exam scores will be dropped, so do not plan on missing any. Your lowest exam will be replaced by the percentage on the final exam if the final exam percentage is higher. This rule will be applied in the case of a missed midterm. *The only time this rule would not be applied is if cheating was involved in any of the exam scores.*

**Final Exam:** A two-hour comprehensive final exam will be given as listed on the calendar.

**Labs:** Lab classes will be held in the Math computer lab S44 on Fridays. You will primarily use Minitab in analyzing data, learning statistical models and working on the class material. Computer labs can be done in groups of no more than three people for a common grade and be turned in by email on the due date. There is no credit for late labs received after midnight on the due date.

**Attendance:** I expect each student to attend every class. If you need to miss a class for an important reason, please know that you are responsible learning the missed material, finding out any announcements or assignment changes made in class. Stay in touch with your classmates and me. Let me know what I can do to help you stay on top of the material. If you exceed more than one week's worth of absences, you should consider dropping the class. If you stop coming to class, you are responsible for dropping yourself or you will receive an F.

**Grading:** Your grade will be determined using the point system as described in the tables below.

Item	Points
2 exams @100 points each	200
Entrance Cards: top 5 @ 4 pts each	20
Homework	50
Labs	110
Group Work	30
Final Exam	140
<b>TOTAL</b>	<b>550</b>

Overall Percentage	Your grade
97% or greater	A+
92 – 97%	A
89 – 92 %	A-
87 – 89 %	B+
82 – 87 %	B
79 – 82 %	B-
75 – 79 %	C+
70 – 75 %	C
55 – 70 %	D
less than 55%	F

**Academic Integrity:** All students are expected to exercise high levels of academic integrity throughout the quarter. You are encouraged to work together but simply copying down answers from another student is not only wrong, but will not contribute to your learning. Any instances of cheating or plagiarism will result in disciplinary action, which may include getting a '0' on the assignment, and report to the PSME dean, which may lead to dismissal from the class or the college.

**Participation:** Communication is important in learning. Please communicate regularly with me and your peers. Active participation in class occurs when you are fully engaged in what is being discussed, and engagement is necessary for success. I look forward to hearing your voice.

**Expectations and Tips for Success:** You will benefit immensely by being disciplined in your approach to this class. Here are my expectations/suggestions for you for this class.

1. Come to each class prepared with your binder, pencil and calculator. Attendance is essential in this class, and is highly correlated with success in any math class. Your math and critical thinking skills improve through discipline. Students who attend class regularly are more likely to succeed.
2. Math is learned by doing! Understanding math concepts and mastering skills improves only through regular practice. Review the class notes regularly and do your homework (written and online) every day. In a math class, regularly synthesizing the information you're learning is crucial. This will allow you to be better prepared for exams, especially the final exam.
3. Seek help when you need it. If you don't understand something, don't give up! Instead:
  - Visit me during office hour or email me questions (see details above).
  - Contact your peers outside of class: One of the best ways to connect with others is through a shared purpose. You have the same goal for this class as your classmates. Help yourself and others by connecting over any struggles with the class. If someone asks for your help, remember that helping someone improves both people's understanding (and makes you feel good).
  - Math Science Tutorial Center, S43: Drop-in, one-on-one and group tutoring is available. Please visit [www.deanza.edu/studentssuccess/mstrc/](http://www.deanza.edu/studentssuccess/mstrc/) for more details.
  - Smartthinking \*\*free\*\* 24-hour online tutoring for De Anza students ([www.deanza.edu/studentssuccess/onlinetutoring/](http://www.deanza.edu/studentssuccess/onlinetutoring/)) – limited to 3 hours for the entire term – available through MyPortal.
  - The Internet: Empower yourself and use the Internet in a way that supports your math goals. Watch videos for concepts and skills you are struggling with. Sites such as stattrek.com and khanacademy.com can be very helpful.
4. Be ready to help your classmates and don't be afraid to ask for help when you need it. We are here to learn.
5. Don't distract yourself during class through conversations unrelated to class or with your phone! Please silence and put away your phone and any other connected device during class. Research has shown that contrary to our belief about ourselves, we are NOT good at multi-tasking. You will severely limit your learning if you distract yourself during the process. Unless you expect an emergency, wait until after class to check your phone.

**Disability Notice:** If you have any special circumstances that you feel may influence your performance in this class (a diagnosed learning disability, physical disability, or anything at all that might interfere with your learning), please email or chat with me privately so we can best accommodate you and we can create a learning environment that works for you.

## Math 10 (12:30 - 1:20 M-F) - Tentative Calendar - Spring 2018

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>April</b> Week 1	Introductions Syllabus; Ch 1 9	Ch 1 10	Ch 2 11	Ch 2 12	Lab 1 due 13
<b>April</b> Week 2	Ch 2 HW 1 due 16	Ch 3 17	Ch 4 18	Ch 4 19	Lab 2 due 20
<b>April</b> Week 3	Ch 4 HW 2 due 23	Ch 5 24	Ch 5 25	Ch 6 26	<b>NO CLASS</b> (Take Home Lab) 27
<b>April-May</b> Week 4	Ch 6 HW 3 due 30	Ch 7 Take-Home Lab due 1	Ch 7 2	Review/Catch-up 3	Lab 4 due 4
<b>May</b> Week 5	Exam 1 (on Ch 1-7) HW 4 due 7	Ch 8 8	Ch 8 9	Ch 9 10	Lab 5 due 11
<b>May</b> Week 6	Ch 9 HW 5 due 14	Ch 9 15	Ch 9 1	Ch 9 2	Lab 6 due 3
<b>May</b> Week 7	Ch 9 HW 6 due 21	Ch 10 22	Ch 10 23	Ch 10 24	Lab 7 due 25
<b>May-June</b> Week 8	<b>HOLIDAY:</b> Memorial Day 28	Ch 10 HW 7 due 29	Ch 10 30	Ch 10 31	Lab 8 due 1
<b>June</b> Week 9	Review/Catch-up HW 8 due 4	Ch 11 5	Exam 2 (on Ch 8-10) 6	Ch 11 7	Lab 9 due 24
<b>June</b> Week 10	Ch 11 HW 9 due 11	Ch 12 12	Ch 12 13	Ch 12, Ch 13 14	Lab 10 due 1
<b>June</b> Week 11	Ch 13 HW 10 due 18	Ch 13 19	Ch 13 20	Review/Catch-up 21	Lab 11 due 22
<b>June</b> Finals Week	<b>FINALS WEEK</b> NO CLASS 25	<b>FINALS WEEK</b> NO CLASS 26	<b>FINAL EXAM</b> 11:30 - 1:30 27	<b>FINALS WEEK</b> NO CLASS 28	<b>FINALS WEEK</b> NO CLASS 29



**Student Learning Outcome(s):**

\*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.

\*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.