Math 10 (10:30-11:20 M-F) – Elementary Statistics and Probability - Syllabus

Fall 2018

Instructor	Doli Bambhania
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Phone	408-864-5382 (for voice messages only, as I'm unlikely to be in my office; I prefer email)
Office Hours	Monday – Thursday 9:00 – 9:20 a.m. and 1:30 – 2:00 p.m.

Required Materials:

- Textbook: **Inferential Statistics and Probability: A Holistic Approach** by Mo Geraghty (Free PDF will be emailed)
- Workbook: **Inferential Statistics and Probability Workbook: A Holistic Approach** by Doli Bambhania and Mo Geraghty (print copy available for $22.10 + tax at De Anza Bookstore)
- A scientific calculator. A graphing calculator is fine. Please note that cell phone calculators will *not* be allowed on quizzes and 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 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 most math classes! 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, quizzes and exams, in addition to correct numerical answers, you will also be graded on your explanations. Practice this carefully and deliberately on your homework, and ask questions if you don't understand.

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.

Entrance Cards: Entrance cards 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.*

Quizzes: We will have several in-class quizzes (see calendar). You will need your calculator. You may bring a 3" x 5" index card of notes.

Exams: Two 50-minute exams will be given in class. You will need your calculator. You may bring a half sheet of notes (both sides). 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. You will need your calculator. You may bring a full sheet of notes (both sides).

Labs: Every Friday, we will meet in S44. On some of the Fridays, we will work on labs using Minitab software. Minitab is useful in analyzing data and learning statistical models. 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.

Project: We will have a comprehensive project that takes you through all the steps of the statistical process.

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
Exams: 2 @100 points each	200
Quizzes: Top 3 @ 20 pts each	60
Entrance Cards: top 5 @ 4 pts each	20
Homework: 10 @ 5 pts each	50
Labs: 5 @ 10 pts each	50
Project	50
Final Exam	120
TOTAL	**550**

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 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 statistics concepts and mastering skills improves only through regular practice. Review the class notes regularly and do your homework 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.
   - 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.
   - Math Science Tutorial Center, S43: Drop-in, one-on-one and group tutoring is available. Please visit www.deanza.edu/studentsuccess/mstrc/ for more details. I will also be setting up group tutoring – details will be given in class.
   - Smartthinking **free** 24-hour online tutoring for De Anza students (www.deanza.edu/studentsuccess/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 devices 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 are expecting an urgent communication, 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 (10:30 - 11:20 M-F) - Tentative Calendar - Fall 2018

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 **Sept**	Introductions Syllabus; Ch 1 **24**	Ch 1 **25**	Ch 2 **26**	Ch 2 **27**	**Lab 1 due** **HW 1 due** **28**
Week 2 **Oct**	Ch 2 **1**	Ch 3 **2**	Ch 3 **3**	Ch 4 **4**	**Quiz 1** **HW 2 due** **5**
Week 3 **Oct**	Ch 4 **8**	Ch 4 **9**	Ch 5 **10**	Ch 5 **11**	**Lab 2 due** **HW 3 due** **12**
Week 4 **Oct**	Ch 5 **15**	Ch 6 **16**	Ch 6 **17**	Ch 6 **18**	**Quiz 2** **HW 4 due** **19**
Week 5 **Oct**	Ch 7 **22**	Ch 7 **23**	Ch 7 **24**	Review/Catch-up **25**	**Exam 1** **HW 5 due** **26**
Week 6 **Oct-Nov**	Ch 8 **29**	Ch 8 **30**	Ch 8 **31**	Ch 9 **1**	**Lab 3 due** **HW 6 due** **2**
Week 7 **Nov**	Ch 9 **Project Assigned** **5**	Ch 9 **6**	Ch 9 **Proj Proposal due** **7**	Ch 9 **8**	**Quiz 3** **HW 7 due** **9**
Week 8 **Nov**	**HOLIDAY: Veterans Day** **12**	Ch 10 **13**	Ch 10 **14**	Ch 10 **15**	**Lab 4 due** **HW 8 due** **16**
Week 9 **Nov**	Ch 10 **19**	Ch 10, Ch 11 **20**	**Quiz 4** Ch 11 **21**	**HOLIDAY: Thanksgiving** **22**	**HOLIDAY: Thanksgiving** **23**
Week 10 **Nov**	Ch 11 **26**	Ch 12 **Project DUE** **27**	Ch 12 **28**	Review/Catch-up **29**	**Exam 2** **HW 9 due** **30**
Week 11 **Dec**	Ch 13 **3**	Ch 13 **4**	Ch 13 **5**	Review/Catch-up **6**	**Lab 5 due** **7**
Finals Week **Dec**	**FINALS WEEK NO CLASS** **10**	**FINALS WEEK NO CLASS** **11**	**FINALS WEEK NO CLASS** **12**	**FINAL EXAM 9:15 - 11:15** **HW 10 due** **13**	**FINALS WEEK NO CLASS** **14**

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.