

Math 10-05 (12:30-2:45) – Elementary Statistics and Probability - Syllabus

Summer 2019

Instructor information:

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Office: S-43A

Office Hours: M-Th 11:30 a.m. – 12:20 p.m.

Required Materials:

- Textbook: **Inferential Statistics and Probability: A Holistic Approach** by Mo Geraghty. A free PDF will be emailed.
- Workbook: **Inferential Statistics and Probability Workbook: A Holistic Approach** by Doli Bambhania and Mo Geraghty. Available at De Anza bookstore.
- A graphing **calculator**. TI-84 or similar. I will be using TI-84 in class for demonstration.

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 from most math classes! You cannot hope to do well in statistics without a clear understanding of statistical concepts. You will need to keep your focus on both concepts and skills. On labs, entrance cards, 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 group work, and ask questions whenever you don't understand something.

Homework: Homework is essential in any math class. You cannot expect to pass the class without putting consistent and honest effort into homework. Prioritize learning through disciplined practice and you will reap the benefits. You will have two types of HWs.

- 1) Written HW: This will be shared with you electronically over email. You are to print it and complete it. Show all work and explain any reasoning. If you cannot come to class on the day that homework is due, send it with a classmate or email it to me that day.
- 2) Online HW: This is set up on the free website myopenmath.com. You will need to create an account on this website first. Then, use course ID: **51132** and enrollment key **Math-10-key** to be able to do the online HW.

Completed homework (both written and online) must be turned in by the due date (see calendar), but should be worked on daily. You will get two late passes (by 24 hours) for each written and online homework. Beyond that, there are NO EXCEPTIONS for on-time submission.

Quizzes: We will have several in-class quizzes (see calendar). There are no make-ups (early or late) for quizzes. You will need your calculator. You may bring a 3" x 5" index card of notes (both sides). Your lowest quiz score will be dropped.

Midterm Exams: Three midterm 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. However, your lowest midterm exam score will be replaced by the percentage on the final exam if the final exam percentage is higher. This rule will also 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: Occasionally, we will explore statistics using Minitab software. Minitab is useful in analyzing data and learning statistical models. Labs can be done in groups of no more than four 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: All students are expected to attend every class, on time. If you need to miss a class for an important reason, note that you are still responsible learning the missed material, finding out any announcements or assignment changes made in class. Stay in touch with your classmates and me. Do not plan to be absent at all.

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

Item	Points
Written Homework: 13 @ 3 pts each	39
Online Homework: 13 @ 2 pts each	26
Quizzes: Top 6 @ 20 pts each	120
Midterm Exams: 3 @100 points each	300
Final Exam	125
Labs: 2 @ 10 pts each	20
TOTAL	630

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 you are expected to write up your answers independently. Any instances of cheating or plagiarism will result in disciplinary action, including 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.

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 class on time prepared with your binder, pencil and calculator. Attendance in math classes is essential and is highly correlated with success!
2. Math is learned by doing math! Understanding statistics concepts and mastering skills improves only through regular practice. Review the class notes regularly and do homework every day. Regularly synthesizing the information you're learning is crucial for success.
3. Seek help when you need it. If you don't understand something, don't give up! Instead:
 - Visit me during office hours or email me questions.
 - Contact your peers outside of class. Help yourself and others by connecting over struggles with the class material.
 - Utilize the Tutorial Center in S43
 - Smarthinking ****free**** 24-hour online tutoring for De Anza students (www.deanza.edu/studentsuccess/onlinetutoring/) – limited to 5 hours for the entire term – available through MyPortal.
 - 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 all here to learn.
5. Don't distract yourself or others during class with your phone or other unrelated activity! Please silence and put away your phone and any other connected devices during class. Research has shown that 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, it can wait! If you need to deal with an urgent situation, please step outside of the class. Otherwise, do not walk in and out of class – that's disruptive to your classmates and me.

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 - Tentative Calendar - Summer 2019

	Monday	Tuesday	Wednesday	Thursday
Week 1 July	Intro, Syllabus Ch 1 1	Ch 2 2	Ch 1 HW due Quiz 1: Ch 1 Ch 2, Ch 3 3	HOLIDAY: Independence Day 4
Week 2 July	Ch 3, Ch 4 8	Ch 2, Ch 3 HW due Quiz 2: Ch 2, 3 Ch 4 9	Ch 4, Ch 5 10	Ch 4 HW due Exam 1: Ch 1, 2, 3, 4 Ch 5 11
Week 3 July	Ch 5, Ch 6 15	Ch 5 HW due Quiz 3: Ch 5 Ch 6 16	Ch 7 17	Ch 6 HW due Quiz 4: Ch 6 Ch 7, Lab 1 18
Week 4 July	Ch 8 22	Ch 7 HW due Exam 2: Ch 5, 6, 7 Ch 9 23	Ch 9 24	Ch 8 HW due Quiz 5: Ch 8 Ch 9, Lab 2 25
Week 5 July-Aug	Ch 9, Ch 10 29	Ch 9 HW due Quiz 6: Ch 9 Ch 10 30	Ch 10, Ch 11 31	Ch 10 HW due Exam 3: Ch 8, 9, 10 Ch 11 1
Week 6 August	Ch 12 5	Ch 11, Ch 12 HW due Quiz 7: Ch 11, 12 Ch 13 6	Ch 13 Review/Catch-up 7	Ch 13 HW due FINAL EXAM 8

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.