Course Syllabus

Math 10: Introductory Statistics

- Fall Quarter, 2020
- CRN# 24947

Course Instructor:

- Joan Parrish, M.A. Mathematics

Teaching Philosophy:

I am committed to providing each student with clear and carefully-structured instruction and a positive and supportive learning environment. I am dedicated to helping you learn and understand statistical concepts and to providing you with the opportunity to apply those concepts to issues relevant to our lives.

Communication Schedule:

- I will answer all emails and Piazza questions within 24 hours as long as they are sent Monday-Friday before 5:00pm. Please note that weekends are my personal time with family. If you email me after 5:00pm on Friday, I will respond to you on Monday. For urgent weekend questions, please post on Piazza so that other students can help you.

Course Description:

Topics include graphical displays of data, principles of probability, confidence intervals, hypothesis testing, and linear regression.

Discussion Forum:

- We will use the Piazza discussion forum for course Q&A.
- On Piazza, you can post questions and get help from the instructor and other students.
- There is also a special section of Piazza that you can use to find partners and teammates for assignments.
- Students are encouraged to use Piazza to ask questions rather than sending an email to allow other students to benefit from seeing the answer.
  - If you have a question, there is a good chance that many other students in the class have the same question and will appreciate your posting it!
  - Remember that posting anonymously is an option.
- You are also encouraged to help each other on Piazza. If you know an answer to a question, please help your classmates by providing the answer.
- Please do not post answers to quizzes and midterms on the forum. Please see the Academic Integrity section below for more ideas about to how to post appropriately and answer questions to maximize your learning and that of your classmates.

Course Materials:

- Statistics (7th edition) by Prem S. Mann ISBN#9780470444665
- A calculator, scientific or graphing (recommended)

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Weekly Topics:

- Week 1: Vocabulary; Graphical Presentations of Categorical Data
- Week 2: Graphical Presentations of Quantitative Data.
- Week 3: Graphical Presentation of Quantitative Data; Measures of Central Tendency and Dispersion
- Week 4: Probability
- Week 5: Probability
- Week 6: Distributions of Discrete Random Variables.
- Week 7: The Normal Distribution.
- Week 8: Sampling Distributions of the Sample Mean and Sample Population
- Week 9: Confidence Intervals
- Week 10: Hypothesis Testing
- Week 11: Linear Regression

Important Dates:

- Monday, September 21 - First Day of Fall Quarter
- Saturday, October 3 - Last Day to [Add](#) Quarter-Length Classes
- Sunday, October 4 - Last Day to [Drop](#) for a [Full Refund or Credit](#)
- Sunday, October 4 - Last Day to Drop with No Record of Grade
- Friday, October 16 - Last Day to Request a [Pass/No Pass Grade](#)
- Wednesday, November 11 - Veterans Day Holiday
- Friday, November 13 - Last Day to Drop with a "W"
- Thursday, November 26 - Sunday, November 29 - Thanksgiving Holiday
- Monday, December 7 - Friday, December 11 - [Final Exam](#) Week
- Your final exam date: Tuesday, December 8th (1:45pm – 3:45pm).

My Expectations for You as a Student:

- My intention is for the online classroom to be a welcoming and friendly environment for all students.
- As a student in this class, you can expect the professor and your classmates to be treat you courteously and respectfully. In your turn, please treat the professor and your classmates with courtesy and respect.

- Additionally, you are expected to behave professionally, both in terms of your demeanor in the online classroom and in terms of your approach to your assignments. This means:
  - You are expected to submit your work on time, except in case of illness or emergency. Please see late work policies below for more information.
  - You are expected to watch all lecture videos for the week.
  - You are expected to attend all class meetings (on Zoom).
  - You are expected to get help *as soon as* you do not understand something. Please join me in office hours, post on Piazza or send me an email

- In the online classroom, we will follow the core rules of [Netiquette](#):

1. **Remember the human**: If you wouldn't say something directly to someone's face, don't say it to them online.
2. **Adhere to the same standards of behavior online as in real life**: If you would not do something in real life, don't do it online. Be ethical.

3. **Know where you are in cyberspace**: Lurk before you leap to make sure you understand proper behavior for each website you visit.
4. **Respect other people's time and bandwidth**: Remember that people are busy and that you are not the center of cyberspace. Keep your posts and questions short. Research your question for yourself before asking someone else.
5. **Make yourself look good online**: Use proper language, grammar and spelling. Be sure you know what you are talking about before you say something.
6. **Share expert knowledge**: If you know the answer to someone's question, answer it.
7. **Help keep flame wars under control**: Don't perpetuate arguments or let your emotions get out of control.
8. **Respect other people's privacy**: Don't snoop through other people's emails, or texts, or research people's personal information online.
9. **Don't abuse your power**: Don't take advantage of other people if you have more knowledge or skills than they do or try to make yourself feel superior by making them look or feel bad.
10. **Be forgiving of other people's mistakes**: Have good manners. Don't correct other people. If you must correct someone, do so in a private email.

- You are expected to follow the De Anza Student Code of Conduct as outlined in the [Online Student Handbook](#) and by Foothill-De Anza Administrative Policies [5510](#) and [5520](#).

What You Can Expect from Me:

- You can expect me to be treat you with courtesy and respect.
- You can expect me to complete my work on time - lesson videos, notes, and assignments will be posted in a timely manner, and your work will be graded within 5 days of submission, at the latest.
- You can expect clarity about the topics covered on your exams and the format of the exams.
- You can expect to be graded fairly in comparison to the rest of the class and that I will assign you a grade using the same standards that I have applied to the rest of the class (no special exceptions for any individual).
- You can expect a response from me within 24 hours for any question posted or emailed on weekdays (not including Fridays after 5pm).

Academic Success and Support Services:

- If you have, or think you have, a disability in any area such as mental health, attention, learning, chronic health, sensory, or physical, please contact Disability Support Services (DSS) to arrange a confidential discussion regarding equitable access and reasonable accommodations. If you are registered with DSS and have accommodations set by a DSS counselor, please be sure that your instructor has received your accommodation letter from Clockwork early in the quarter to review how the accommodations will be applied in the course.

- Students who need accommodated test proctoring must meet appointment booking deadlines at the Testing Center.
- Exams must be booked at least five (5) business days in advance of the instructor approved exam date/time.
- Final exams must be scheduled seven (7) business days/weekdays in advance of the instructor approved exam date/time.
- For more information, please visit the [Disability Program Support Services website](#) or visit the DSS in the RSS Building, Suite 141, or call (408) 864-8753.

Plagiarism and Cheating:

- The Student Code of Conduct states that plagiarism, in-class cheating, out of class cheating and furnishing false information are not allowed under any circumstances. Any student found violating the [Academic Integrity Section of the Student Code of Conduct](#) will be confronted by the instructor.
- Depending on the nature and extent of the violation, the student may receive a warning, may receive a lowered grade on the assignment or in the course, or may be failed on the assignment or in the course.
- The student may also face administrative consequences, including being placed on disciplinary probation, being placed on disciplinary suspension, being expelled, or being subject to arrest and or heavy fines if the academic dishonesty offense violates state or federal law.
- In brief: Cheating in any form is a serious matter and will not be tolerated.

Assignment Integrity:

- You are expected to work alone on some assignments and with other students on other assignments as listed in the assignment specifications.
- When working alone, you must do all your own work.
- You may discuss assignments with other people, but ultimately you must write your own solutions.
- Copying solutions to assignments from online sources is considered cheating.
- When working a partner, the assignment specifies how you must contribute. Group work can accelerate learning, but only when each student takes responsibility for mastering all the assigned material. Little is learned if each student works only part of the assignment and merely copies answers for the rest.
- If the assignment seems too hard to complete without more help, whether working with a partner or not, then you should contact me. My job is to help you understand the material.
- Note that this list does not include tutors. Tutors must follow the same rules for acceptable help as other non-students.
- You may still help other students, and receive help from other students and tutors, and I encourage you to do so. The following lists are intended to help clarify the rules about appropriate assistance for assignments:

Acceptable Help:

- Explaining to others how to solve a problem
- Discussing problems and ideas for solving problems with other students or tutors.
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Unacceptable Help:

- Typing or writing any homework solution (or parts of a homework solution) for another person, or allowing someone to type or write a homework solution for you
- Looking at another person's homework while typing or writing your homework.
- Listening to someone else dictate homework while typing or writing, or dictating homework solutions to someone typing or writing
- Providing a copy of your assignment solution, or any other person's solution, to anyone who is taking this course or might take this course in the future, including posting your solution online or emailing it to someone
- Receiving a copy of an assignment solution, or a part of a solution, from a former student of one of my classes or another student in this class until after you make a final submission of your assignment and the due date has passed
- Uploading your work online for other students to view or viewing another student's work online (including the Piazza forum)

  These are not all-inclusive lists. Students are expected to interpret and apply the overall concepts of academic honesty in good faith. If you have questions about what is permissible, please ask me.

  Also, note that these rules do not prohibit you from sharing assignment solutions with other students after both you and the other student have made a final submission of the assignment, and the due date has passed. Reviewing other people's solutions can help you learn, but it is cheating unless you have already completed the assignment on your own. Please be aware that I will be providing homework solutions after the due date is passed.

Attendance:

- I reserve the right to drop you from the course if you do not submit the first week's assignments or do not submit up to 2 weeks-worth of assignments during the quarter. However, it is your responsibility to drop yourself if you do not wish to take this course. Please do not count on my dropping you.

Grading Policies:

- Grading is done by a point system, converted to a percentage scale, to determine the final grade.
- The percentages of the grade for each component of the course that contributes to the overall final grade are as follows:

  6%   Study Guides
  9%   Homework
  10%   Weekly Quizzes
  45%   Midterm Exams (3 Exams at 15% each)
  30%   Final Exam (Cumulative)

- Grades will be assigned as follows: Note: [,] mean included while) means not included

  [97.0 - 100.0%]   A+
  [93.0 – to 97.0%) A
  [90.0 – 93.0%)   A-

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  [87.0 – 90.0%)   B+
  [83.0 – 87.0%)   B
  [80.0 - 83.0%)   B-

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  [77.0 - 80.0%)   C+
  [70.0 - 77.0%)   C

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  [67.0 – 70.0%)   D+ (Not Yet - Please Retake the Course)
  [63.0 – 67.0%)   D (Not Yet - Please Retake the Course)
  [60.0 – 63.0%)   D- (Not Yet - Please Retake the Course)

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  [0.0 – 60.0%)   F (Not Yet - Please Retake the Course)

Course Assignments

Study Guides and Peer Review (6%):

- Two study guides will be due each week - on Tuesdays and Thursdays at 11:59pm.
- Peer evaluations of the study guides are due on the day after the study guide is due, no later than 11:59pm.
- The study guides are to be completed with the help of the associated videos posted on Canvas for that week.
- Study guides are graded based on correctness.

Homework (9%):

- Two homework assignments will be due each week - on Mondays (assigned on the previous Thurs) and Fridays (assigned on the previous Tuesday). The deadline is 11:59pm on the due date.
- Homework will be graded on completeness. It is your responsibility to check your work against the solutions provided after the due date.

Submissions and penalties related to both homework and study guides:

- Late study guides, peer reviews, and homework will be accepted up to one day late, subject to a 20% point penalty.
- All submissions must be made on Canvas. Once the assignment is closed on Canvas, it can no longer be submitted.
  - No submissions are accepted by email or Canvas messenger.
- If you experience an emergency and cannot submit your work, please send me an email as soon as possible to let me know.

Quizzes (10%):

- Once each week, except in an exam week, there will be a quiz covering the material from the prior week's lessons.
- Quizzes are released on Tuesdays and are due Sundays at 11:59pm on Canvas.
- Quizzes can be taken as many times as desired up until the deadline. The final score is entered in the gradebook. The goal is to learn the material by making errors on the initial attempts, not the final attempt. Therefore, I recommend that you take the quiz at the start of the week, and then keep taking it throughout the week to help guide your understanding of the material.
- Because students have 5+ days during which to take the quiz, no quizzes will be accepted after the deadline.
- I advise against collaborating with other students on your quizzes. Instead, use them as a guide to help gauge your understanding of the course material.

Three Midterm Exams (45%) and the Final Exam (30%):

- There will be three midterm exams and one (cumulative) final exam in this course.
- All exams must be taken on Canvas on the scheduled date and time.
- You will be required to show your photo ID to be allowed to sit for the exam.
- The exam dates for the quarter are as follows:
  - Midterm 1 on or about Tuesday, October 13, 2:30pm-3:30pm on Canvas
  - Midterm 2: or or about Tuesday, November 3, 2:30pm-3:30pm on Canvas
  - Midterm 3: on or about Tuesday, December 1, 2:30pm-3:30pm on Canvas
  - Final Exam on Tuesday, December 8th (1:45pm – 3:45pm).on Canvas
- No makeup exams will be offered - no exceptions.
- In the case of illness or emergency -- and at the instructor's discretion -- a student who must miss one midterm exam may have the relevant part of their final exam score substituted for the missed midterm. Only one midterm exam score may be substituted.
- To take advantage of the missed midterm policy, you must contact the instructor by email *before* the midterm ends to receive permission. If I do not receive an email from you, you will receive a 0 on the midterm.
- The final exam must be taken at the posted date and time, no exceptions. If you cannot take the final exam on the posted date and time, please take this class another quarter.
- Exam integrity is an equity issue.
  - When exams are not proctored, those with more money or other privileges have greater access to resources during exams, and, therefore, an unfair advantage.
- To ensure that no student has an unfair advantage over any other, students will be required to use Proctorio (Links to an external site.) on exams.
  - Proctorio has been vetted for security and privacy by the State of California and is FERPA, COPPA and California Student Privacy Certified by the Internet Keep Safe Coalition.

- o Additionally, in June 2020, it was independently audited for [Zero-Knowledge Encryption](#) of student data, meaning that no one has access to student data aside from the professor.
- o Read more about Proctorio's [privacy](#) and [data security](#) policies.
- o After each exam, students are encouraged to uninstall Proctorio, and only to reinstall it before the next exam.
- To take the exams, you must have a webcam and microphone attached to the computer on which you are taking the exam.
- You must open Canvas on the Chrome browser.
- If your home computer does not have a webcam, you can purchase an inexpensive one for use during the class. Please contact me as soon as possible if you find the cost of a webcam to be a barrier to taking this class, and I will work with you to procure a webcam. I will need advanced notice, so please do not wait until right before the exam to alert me to this issue.

~ Have a Great Quarter! ~

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.