De Anza College
Math 10 – Introduction to Statistics (CRN# 27620)

Instructor: Alex Cheng   **Email:** chengalex@fhda.edu

Office Hours: Friday 3:30 PM - 5:00 PM on Zoom

Class meets in person every **Monday**, **Wednesday** & **Thursday** from **1:30 PM-3:45 PM** in **S49**

Course Description:
Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, social sciences, psychology, the sciences, and those pertaining to issues of contemporary interest. The use of technology (computers or graphing calculators) will be required in certain applications. Where appropriate, the contributions to the development of statistics by men and women from diverse cultures will be introduced.

Student Learning Outcome(s)
1. 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.
2. Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
3. 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.

Textbook & Required Materials:
- Introductory Statistics by Illowsky, Barbara & Dean, Susan A FREE pdf version of the textbook is available at: https://openstaxcollege.org/textbooks/introductory-statistics
- Graphing Calculator with statistical tests functions: TI-83 PLUS, TI-84, or TI-84 PLUS recommended.
- Access to a computer to complete assignments and labs posted on Canvas
- You need to print a chapter material course each week, available on Canvas.

Withdrawal/Drop Policy: It is the ultimate responsibility of the student to drop the class. Do not rely on the instructor to drop.

Attendance: Students are expected to attend all class meetings, arrive on time, take note, and stay for the entire class. The instructor reserves the right to drop/withdraw students who are absent more than five lectures during the quarter. However, a student who discontinues coming

to class and does not drop the course will get an F. It is the student's responsibility to drop the course.

Smartphone Use: All smartphones must be on silent mode and put away during lecture. We do not learn how to text or searching the Web in this class, so there is no reason to have smartphones out during class unless the instructor allows so.

Grade Breakdown:
A+:100-97% A:96-93% A-:92-90% B+:89-87%   B:86-83%   B-:79-81% C+:77-78% C:69-76%
D:62-66% D-:60-61% D+:67-68%   F:<60%

Homework (11)	11 X 10 = 110 points
Statistics Labs (3)	3 X 50 = 150 points
Group Quizzes (5)	5 X 20 = 100
Exams (3)	3 X 100 = 300 Points
Final	100 points
Total	760 points

Homework: HW sets will be posted in Canvas at the start of each week and are due at the end of the week. You will submit your HW solutions thought Canvas. Late assignments will not be accepted.

Labs: You will use Minitab and other statistical software in analyzing data, learning statistical models and working on the class material. Computer labs can be done in groups of no more than four people for a common grade and be turned in by the due date.

Group Quizzes: There are group quizzes in our class. Quizzes will focus on the materials covered during that week.

Exams: There will be 3 exams which will all be taken in person. You may use a 8.5 X 11 inch sheet of handwritten notes to use during exams. No make-ups will be allowed. Extensions will not be given on exams. In the case of a documented emergency, I will replace a missing exam score with the corresponding portion of your final grade. See the course calendar for tentative exam dates.

Final: The final exam will be comprehensive and will be given in person. See Tentative schedule.

Tutoring Services: The De Anza campus has a free tutorial center for math students where students can get "drop in" help or make appointments with a tutor. Also, there are specific MPS

tutors available for free. Check Canvas for links to access these tutors through Zoom meetings. Additionally, I am very glad to help you in office hours. Please use your resources.

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

Student Honesty Policy: "Students are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal."

Disabled Services: Students who have been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorized for the current quarter. If you are not registered with DSS and need accommodations, please go to http://www.deanza.edu/dss.

Recipe for Success:
1. If you ever have any questions, Email me! You are welcome to send email to me whenever you need help!
2. Visit the Online Tutoring Center.
3. Form a study group.
4. Attend all lectures, participate in every discussion, and complete every homework assignment.
5. Read the sections to be discussed in class prior to the lecture

Fall 2023 Tentative Schedule

Week	Monday	Tuesday	Wednesday	Thursday
1	**September 25** CH 1: Sampling and Data	**26**	**27** CH 2: Descriptive Statistics	**28** **Review week#1**
2	**October 2** CH 2: Descriptive Statistics	**3**	**4** CH 3: Probability	**5** **Review week#2**
3	**9** CH 3: Probability	**10**	**11** **Exam #1 (Ch.1-3)**	**12**
4	**16** CH 4:Discrete Random variables	**17**	**18** CH 5: Continuous Random Variables	**19** **Review week#4**

5	**23** CH 6: The Normal Distribution	**24**	**25** CH 7: The Central Limit Theorem	**26** **Review week#5**
6	**30** Review for Exam#2	**31**	**November 1** **Exam#2 (Ch.4-7)**	**2**
7	**6** CH 8: Confidence Intervals	**7**	**8** CH 8: Confidence Intervals	**9** **Review week#7**
8	**13** CH 9: Hypotheses Testing (Single mean, single proportion)	**14**	**15** CH 9: Hypotheses Testing (Single mean, single proportion)	**16** **Review week#8**
9	**20** CH 10: Hypotheses testing (two means, two proportions, paired Data)	**21**	**22** CH 10: Hypotheses testing (two means, two proportions, paired Data)	**23** **Thanksgiving Holiday!**
10	**27** Review for Exam#3	**28**	**29** **Exam#3 (CH.8-10)**	**30** **Review week#10**
11	**December 4** CH 12: Linear Regression	**5**	**6** CH 11: Chi-Square Distribution CH 13: F-distribution and the ANOVA	**7** **Review for FINAL EXAM**
Final	**11** **FINAL EXAM**	**12**	**13**	**14**

Important Dates and Deadlines: http://www.deanza.edu/calendar/dates-and-deadlines.html

De Anza Final exams schedule: https://www.deanza.edu/calendar/final-exams.html

*This syllabus is subject to change at the instructor's discretion. Changes will be announced in class and on Canvas.

Student Learning Outcome(s):

• Demonstrate mathematical concepts, skills and numeracy needed for understanding Probability and Statistics.

Office Hours:

F,SA   03:30 PM   05:00 PM   Zoom,Email,Canvas