## Statistics <br> Instructor: Parviz Sales

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Prerequisite: Passing grade ( C or better) in Intermediate Algebra (Math 114) or equivalent.
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, the sciences, and other related fields.

Textbook \& Relate Materials: Statistics Labs and Study Guides (Canvas download). TI 83, or TI 84 Graphing Calculator (Required). Introductory Statistics, by Illowsky / Dean (Optional) which is a free download from the url: https://openstax.org/details/introductory-statistics

Attendance: Success in the class requires regular and consistent attendance. Students have complete responsibility for withdrawing from the course for any and all their reasons. The last day to drop the class with a "W" is May $28^{\text {th }}$. Students who don't withdraw in a timely manner and stop attending class will receive a final grade of "F".

Laboratory: There are 12 lab assignments(Canvas download). These are assigned randomly during the quarter. All the labs will be worth as 120 points. Late Lab Assignment will not be accepted.

Homework: There are 5 homework assignments(Canvas download). These are assigned randomly during the quarter. All the homework will be worth as 50 points. Late Assignment will not be accepted.

Assessments: There will two quizzes, each 25 points and two tests, each of those 100 points. There will be no make-up for missed assessment, as I cannot accommodate that. Nonetheless in the unfortunate event of an absence, I will duplicate your final grade for the only one missed assessment. Final Exam will be comprehensive and worth 120 points. Final Exam is mandatory and not taking it translates to a final quarter grade of "F". (Department policy.) Final Exam will be given on Thursday, 6-24 @ 4 p.m. Please don't ask for an early final, as I won't be able to accommodate that. Thanks.

Grading: Your quarter grade will be determined with the following scale:

| $97 \%-100 \%$ | A+ | $93 \%-96 \%$ | A | $90 \%-92 \%$ | A- |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $87 \%-89 \%$ | B+ | $83 \%-86 \%$ | B | $80 \%-82 \%$ | B- |
| $77 \%-79 \%$ | C+ | $70 \%-76 \%$ | C | $67 \%-69 \%$ | D+ |
| $63 \%-66 \%$ | D | $60 \%-62 \%$ | D- | $59 \%$ and below | F |

Some notes about online learning: First of all, this class is fully synchronous. That means you have to be present @4:00 p.m. Tuesday and Thursday. That is where the action is, so to speak. There will be instruction, followed up with examples, data sharing and data collection to complete labs. Additionally, all assessments will go down during class time. There will be no posting of lectures and notes online, as I am technologically challenged. Sorry. I recommend and facilitate study partners. Here we go...

Study partner \#1 contact information: $\qquad$
Study partner \#2 contact information: $\qquad$
Study partner \#3 contact information: $\qquad$
Study partner \#4 contact information: $\qquad$

Tutoring Services: The De Anza campus has a tutorial center for math students where students can get "drop in" help. Students can also register to have a regular, assigned tutor for help throughout a quarter. For relevant information go to: https://www.deanza.edu/studentsuccess/

Tentative Schedule for Math 10, Spring 2021

|  | Tuesday | Thursday |
| :--- | :--- | :--- |
| April | $\mathbf{6}$ <br> Introduction, Chapter 1 | $\mathbf{8}$ <br> Chapter 2 |
| April | $\mathbf{1 3}$ <br> Chapter 3 | $\mathbf{1 5}$ <br> Chapter 3 |
| April | $\mathbf{2 0}$ | $\mathbf{2 2}$ <br> Chapter 4, Quiz 1 |
| May | $\mathbf{2 7}$ <br> Chapter 5 |  |
| May | $\mathbf{4}$ <br> Test 1 | $\mathbf{1 1}$ <br> Chapter 7 |
| May | $\mathbf{1 8}$ <br> Chapter 8 | $\mathbf{2 9}$ <br> Chapter 6 |
| May | $\mathbf{2 5}$ <br> Chapter 10 | $\mathbf{6}$ <br> Chapter 6 cont. |
| June | $\mathbf{1}$ <br> Chapter 11 | $\mathbf{1 3}$ <br> Chapter 8 |
| June | $\mathbf{8}$ <br> Chapter 13 | $\mathbf{2 0}$ <br> Chapter 9 |
| June | $\mathbf{1 5}$ <br> Chapter 13 cont. | $\mathbf{2 7}$ <br> Chapter 10 cont., Quiz 2 |
| June | $\mathbf{2 2}$ <br> No Class | $\mathbf{3}$ <br> Chapter 12 |
|  |  | $\mathbf{1 0}$ |
| Test 2 |  |  |

## 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.

