## Math 10: Introductory Statistics, Winter 2019 Tuesday/Thursday 4:00 – 6:15 pm

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Office Hours: Tuesday/Thursday after class (in library or other location)

## **Required Materials:**

- 1) Textbook: Introductory Statistics. This is available for free online via Openstax at <a href="https://cnx.org/contents/MBiUQmmY@23.33:2T34">https://cnx.org/contents/MBiUQmmY@23.33:2T34</a> 25K@14/Introduction or at <a href="https://openstax.org/details/books/introductory-statistics">https://openstax.org/details/books/introductory-statistics</a>
- 2) A graphing calculator. Please try to obtain by the second week.
- 3) Notebook, paper and writing tools.

**About the Course:** Statistics is a mathematical science, and while there are some computations and formulas, these days technology handles most of that. The bulk of the subject lies in the concepts – using statistical language, collecting and processing data, and interpreting results. As a result, you will be doing a lot of *writing* in this course. You will be graded on your explanations as well as numerical answers. Use homework and class to practice this, and always ask questions of each other and of me if you don't understand something.

**About the Textbook:** Our textbook, Introductory Statistics, was developed partly by De Anza faculty and it will be our primary resource for homework and experiments, as well as reading.

We will not be able to cover 100% of the material in the book during our class time. As such, it is your responsibility to READ each section as needed. I encourage you to read sections more than once, as well as take notes. Any of the material in the textbook is fair game.

**Course website:** Canvas will be the main hub of information for the course. All course materials will be uploaded and made available as the course progresses. You can log in at <a href="https://deanza.instructure.com/">https://deanza.instructure.com/</a> or through MyPortal.

**Grades:** We will use a standard letter grading system with plus/minus (97-100 A+, 93-96 A, 90-92 A-, etc). Your grade will be made up of the following:

Weekly Homework	15%	Online Quizzes	5%
Labs and Experiments	20%	3 Exams	30%
Final Evam	200/		

Final Exam 30%

**Weekly Homework:** There are weekly homework assignments, which will be due every *Tuesday* at the beginning of class. Problems will be assigned from the textbook. They will be graded for completeness and correctness. Expect to spend many hours per week on problems!

Homework is 15% of your grade. The lowest 2 scores will be dropped.

**Labs and Experiments:** Statistics is about both gathering and analyzing data. Roughly once a week, we will perform statistics experiments and investigations. These activities will come from the textbook and cover the most recent chapter.

You will be working together with a partner for each lab and together you will turn in a single assignment. Labs are worth 20% of your grade. If miss a day with a lab, email me and you must complete the lab independently as homework and submit it within one week of the absence.

**Online Quizzes:** We will have quizzes on Canvas every few weeks. These will be posted on Canvas and with a due date. Try your best do to them without outside help and without notes. They are meant to help you assess your own understanding and practice for the exams.

**Exams:** We will have 3 midterm exams throughout the semester. The dates are listed on the schedule in bold. Each will be administered during the first half of class (around 60 minutes). You will need your graphing calculator for each exam. You may also bring with you a 3x5 handwritten index card of notes. I WILL PROVIDE A FORMULA SHEET FOR EACH EXAM.

Each midterm is 10% of your grade. If you must miss a midterm exam, notify me ASAP.

**Final Exam:** The final exam will be cumulative and is scheduled for *Thursday, March 26<sup>th</sup> from 4 pm to 6 pm.* We will not meet for class that Tuesday. You will be allowed one page of notes (one sided) as well as your graphing calculator, and I will provide a formula sheet.

NO MAKEUP FINAL EXAM WILL BE GIVEN. If you miss the final exam, you will fail this course.

**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 also expected to write up your answers independently when required. 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.

**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 that we can best accommodate you and we can create a learning environment that works for you.

## **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.