De Anza College Math 10 – Introduction to Statistics

Instructor: Danny Tran Email: <u>trandanny@fhda.edu</u>

Course Description: This course is an 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. This Statistics course is a required lower-division course for students majoring or minoring in many disciplines such as data science, nursing, business, and others.

Book: Introductory Statistics by Illowsky, Barbara & Dean, Susan

A FREE pdf version of the textbook is available at:

https://openstaxcollege.org/textbooks/introductory-statistics

Required Materials: Graphing Calculator with statistical tests functions: TI-83 PLUS, TI-84, or TI-84 PLUS

is recommended. Access to a computer; we will be using Zoom, Canvas, and Minitab.

Course materials and assignments will be posted on Canvas and WebAssign.

Grading: Homework (WebAssign) (12) 180 points

Statistics Labs (2) 90 points
Chapter Video Questions 30 points
Term Project 170 points
Quizzes (3) 150 points
Exams (2) 180 points
Final Exam 200 points
Total 1000 points

WebAssign: This is the online program we will be using to complete homework assignments. It

will cost approximately \$45 for online use this quarter. You can purchase access either through WebAssign.net or by buying an access code at the De Anza Student

Bookstore. Please follow the below directions:

1 – Go to our Canvas course.

2 – Click on Assignments

3 - Click on any of the WebAssign / Cengage assignments

4 - Register for an account

Late Assignment Policy: If you are unable to complete an assignment on time, you may request a 1-week extension from the original due date through WebAssign. Please make the request any time after the original due date. You will earn 50% of the points earned after the original due date.

Quizzes & Exams: Quizzes and exams are tentatively scheduled in the daily schedule on the next page. If a quiz or exam date is changed, I will notify you all in class and on Canvas as soon as I can. If you miss 1 quiz, your final exam % will replace your missed quiz (same rules for a missed exam). If you take all your

quizzes, and your final exam % is greater than your worst quiz %, your final exam % will replace your worst quiz % (same rules for exams).

## **Expectations**:

Math 10 is an incredibly challenging course; be sure you put yourself in the best situation to succeed by having terrific study habits. Below is a list of tasks I recommend that you do to best succeed in this course & prepare yourself:

- ✓ Watch all videos and understand calculator directions
- ✓ Complete all homework
- ✓ Preview each lesson by skimming the lesson for 10-15 minutes before class meets
- ✓ Review your notes each day, making sure you have understood the material
- ✓ Attend office hours (Zoom)
- ✓ Form study groups to complete homework, study for exams
- ✓ Read the textbook
  - o Read explanations & work through the completed examples
  - o Complete extra practice problems

## Grades:

Α	[93%, 100%]	B+	[87%, 90%)	C+	[77%, 80%)	D	[60%, 70%)
A-	[90%, 93%)	В	[83%, 87%)	С	[70%, 77%]	F	[0%, 60%)
		R-	(80% 83%)				

Tentative Daily Schedule:

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Jan 6	Jan 8			
Intro, Ch1	Ch1, Ch2			
Jan 13	Jan 15			
Ch2	Ch3			
Jan 20	Jan 22			
MLK Jr. Day – No Class	Ch3, Ch4			
Jan 27	Jan 29			
Quiz#1 (Ch1-3), Ch4	Ch4, Ch6			
Feb 3	Feb 5			
Ch6, Ch7	Ch7, Exam #1 Review			
Feb 10	Feb 12			
Exam #1 (Ch1-4; 6-7)	Ch8			
Feb 17	Feb 19			
Presidents' Day – No Class	Ch8			
Feb 24	Feb 26			
Ch9	Ch9			
Mar 3	Mar 5			
Quiz #2 (Ch8-9), Ch10	Ch10			
Mar 10	Mar 12			
Ch11	Ch12, Exam #2 Review			
Mar 17	Mar 19			
Exam #2	Ch12, Ch13, Final Review			
Mar 24				
Final Exam (1130A – 130P)				
D. 14. 6 G . 76 11. 14.				

Disability Support Services: If you need disability support services, please email <u>dss@deanza.edu</u>, phone (408) 864-8838, or visit https://www.deanza.edu/dsps/dss/.

Need help with this course? Want to more personal connections this quarter? Student Success Center tutors and workshops are ready for you! Watch the <a href="SSC Welcome Video">SSC Welcome Video</a> to learn more.

**Tutoring:** Go to <a href="http://deanza.edu/studentsuccess">http://deanza.edu/studentsuccess</a> and click to join a Zoom tutoring room during open hours.

**Workshops:** Attend a <u>Skills Workshop</u>, a <u>content-specific math/science workshop</u>, an <u>Accounting</u> chapter review workshop, or a Listening and Speaking workshop.

**Resources:** Join the <u>SSC Resources Canvas site</u> to see content and learning skills links.

**After-hours or weekend tutoring:** See the <u>Online Tutoring</u> page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

We know that students who participate in tutoring, group study, or workshops for three or more hours succeed at much higher rates than those who do not. The students who most need the help may reluctant, but they do participate if instructors encourage and incentivize them to use the resources in some way. Perhaps students can improve their grade on an assignment, quiz or exam if they show they did something extra to prepare, such as tutoring, workshop or study group.

We're here to help! Get in touch to schedule a class visit, or arrange to bring your class to visit us in Zoom to see how it works.

Questions, comments, or suggestions? Contact Co-Directors Melissa Aguilar <u>aguilarmelissa@fhda.edu</u> or Diana Alves de Lima <u>alvesdelimadiana@fhda.edu</u> the appropriate <u>SSC contact</u>.

## **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 evaluate conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

## **Office Hours:**

TH 11:00 AM 12:50 PM Zoom M,W,T,TH 08:10 AM 08:30 AM In-Person MLC108 M,W 10:40 AM 11:00 AM In-Person MLC108