



Math 10.35Z – Introductory Statistics
Meets: TTh, 4:00 PM to 6:15 PM
Online classes via Zoom

Winter 2021

Instructor: Lilit Mazmanyman	
Contact: mazmanymanlilit@fhda.edu	Office hours: Friday, 4:00 – 5:00 PM, online via Zoom (check Canvas course for instructions)

This is an online class and instructional method is **synchronous**. Lectures will be delivered online via Zoom during scheduled class times. Virtual breakouts will be used for group collaboration. Instructions how to connect Zoom lectures can be found on Canvas, which are accessible to you via **MyPortal** as you are enrolled in the course. You can also access Canvas using direct link (<https://deanza.instructure.com>) with your MyPortal login credentials. We will communicate via Canvas Inbox, discussion board, Zoom office hours, and emails. Check periodically Canvas announcements. Instructions to access WebAssign for online homework and Zoom for office hours can be found on our Canvas course.

Information about Canvas and Online Education Orientation can be found in Canvas on the Student Resources page: <https://deanza.instructure.com/courses/3382>. The Student Online Resources hub with extensive information and tips can be found at deanza.edu/online-ed/students/remoteteaching.

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.

Requisites

- *Prerequisite:* Intermediate Algebra (MATH 109, MATH 114 or MATH 130) or equivalent.
- *Note:* Not open to students with credit in MATH 10H.
- *Advisory:* EWRT 211 and READ 211, or ESL 272 and 273.

Textbook

Barbara Illowsky and Susan Dean, *Introductory Statistics*, OpenStax College, 2013, ISBN: 978-1938168208

- This is an open source textbook which is available through our Canvas course and free online:
<http://openstaxcollege.org/textbooks/introductory-statistics/get>
- Printed edition can be purchased or rented at the [DeAnza College bookstore](#).

Supporting Textbook

Maurice A. Geraghty, *Inferential Statistics and Probability-A Holistic Approach*, De Anza College, 2018.

<http://nebula2.deanza.edu/~mo/holistic/HolisticStatisticsRev180817.pdf>

Calculators and Computer Software

- A TI-83 PLUS, TI-84 or TI-84 PLUS graphing calculator is recommended.
- Cell phones or other devices CANNOT be used in place of a permitted calculator on any quiz or examination.

- Graphing calculator and computer software Minitab are **REQUIRED** to complete the Laboratory assignments.

Homework (HW)	<ul style="list-style-type: none"> • Homework must be completed online using WebAssign. • You need a Class Key and Access Code for WebAssign. • CLASS KEY to register on WebAssign WILL BE SENT TO YOU BY EMAIL. • You must self-register at http://www.webassign.net to use the WebAssign. • ACCESS CODE can be purchased online after signing in WebAssign or through. DeAnza College bookstore • Cost to access WebAssign is about \$45 for the quarter. • WebAssign is FREE for two (2) weeks of the quarter only. • After the due date/time, HW cannot be submitted for credit. • After the due date/time, the answer key is available online. • There are thirteen (13) chapter homework assignments which are distributed between ten (10) homework due dates. • The lowest homework grade will be dropped. • There will be ungraded homework assignments from textbook.
Labs (L)	<ul style="list-style-type: none"> • Laboratory assignments will be assigned on Canvas. • May be used graphing calculator or may be used statistical software Minitab. • Must be done in groups of at least two and no more than four. • LATE Laboratory work will be penalized by 20% of the grade. • No laboratory grade can be dropped.
Quizzes (Q)	<ul style="list-style-type: none"> • Quiz is online based on classwork and homework. • NO MAKE-UP QUIZZES are given. • Missed quiz is graded as a zero (0). • The lowest quiz score will be dropped.
Exams & Final Exam (EX, FE)	<p>There will be four (4) examinations</p> <ul style="list-style-type: none"> • EX 1, 2 & 3 are one hour each and Final exam is two (2) hours. • EX 1, 2 & 3 and the FE dates are on the course schedule. • It is recommended to have ready one or two sheets of notes. • There are NO MAKE-UP examinations. • An absence from any examination earns a grade of zero (0). • You MUST take the final exam to pass the course. <p>Quizzes and Exams will be assigned via WebAssigning or Canvas. Check the announcements and follow the course schedule on Canvas.</p>

Grading	Students will be graded on homework (HW), quizzes (Q), discussions (D), laboratory work (LW), and exams (EX1, 2 & 3, FE).					
	Distribution of weights for each category					
	Category			% Weight on Final Grade		
	Homework			10 %		
	Quiz			10 %		
	Discussions			5 %		
	Lab			10 %		
	Exam 1			15 %		
	Exam 2			15 %		
	Exam 3			15 %		
Final Exam			20 %			
Grading Scale						
			A	94-100	A-	90-93
B+	87-89	B	83-86	B-	80-82	
C+	77-79	C	70-76	D	60-69	
				F	<60	

Important Dates and Deadlines

<https://www.deanza.edu/calendar/>

Monday	January 4	First day of Winter Quarter 2021
Saturday	January 16	Last day to add classes
Monday	January 18	Last day to drop classes with no record of "W" Last day to drop classes for full refund or credit
Monday	January 18	Martin Luther King Jr. Holiday
Friday	January 29	Last day to request "Pass/No Pass" for 12-week classes
Friday-Monday	February 12-15	Presidents' Holiday
Friday	February 26	Last day to drop classes with "W"
Thursday	March 25	Final examination

Online Education Center

- [Student Resource Hub](#): Visit this site for tips, guides and answers to your questions about using Canvas, Zoom and other online learning tools that your classes may be adopting.
- [Staying Organized](#): This webpage has advice for planning and staying on top of your online coursework.
- [Canvas Help](#): Need technical support with Canvas? This page has information on how to get help.
- [More Student Resources](#): Visit this page for more links and tips.

California Virtual Campus

- [Get Ready for Online Learning](#): This website has videos about getting "tech ready," managing your time, communicating with instructors and more.

Student services and support

<https://www.deanza.edu/online-spring/#Services>

- Tutoring and Library Help
- Computers and Tech Products
- Internet Access

- Food and Financial Assistance
- Health and Psychological Services

Attendance, Drops or Withdrawals

- Regular online attendance is essential for success in the course.
- You must not miss a class in the first week of the quarter or you will be dropped.
- A student who discontinues coming to class and does not drop the course will automatically receive a ‘F’ grade for the course.
- It is the student's responsibility to drop or withdraw from this course by the college deadlines.

Academic Honesty and Discipline Policy:

Students are expected to abide by the DeAnza College Code of Conduct and not participate in academic dishonesty.

https://www.deanza.edu/policies/academic_integrity.html

Student Success Center

<http://deanza.edu/studentssuccess/mstrc/>

Hours of online Zoom Tutoring Center are Monday to Thursday 9:00-6:00 PM and Friday 9:00 AM-12:30 PM.

The SSC provides free tutoring services such as individual, drop-in, groups, in-class and workshops.

For individual tutoring, fill out a weekly individual application:

http://deanza.fhda.edu/studentssuccess/mstrc/weekly_ind.html

For group tutoring, contact to Helen at nguyenhelen@deanza.edu.

Disability Support Services

<https://www.deanza.edu/dsps/dss/>

Students with disabilities who qualify for academic accommodations must provide a notification from the Disability Support Services (DSS) and discuss their specific needs with the instructor at the beginning of the quarter.

For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) please contact Disability Support Services (DSS).

Phone number: (408) 864-8753

Email: dss@deanza.edu

Tentative Schedule

		All Assignments except Examinations are due Sunday, 10:00 PM
Week 1	January 4-10 Syllabus/Chapters 1&2 Sampling and Data; Descriptive Statistics	HW Ch.1, Quiz 1
Week 2	January 11-17 Chapters 2&3 Descriptive Statistics; Probability Topics	HW Ch.2, Quiz 2
Week 3	January 18-24 Chapters 3&4 Probability Topics; Discrete Random Variables	HW Ch.3, Lab 1 due
Week 4	January 25-31 Chapter 5 Continuous Random Variables	HW Ch.4 Exam 1 (one hour): Chapters 1-4 (January 28)
Week 5	February 1-7 Chapters 6&7 Normal Distribution; Central Limit Theorem	HW Chs.5&6, Quiz 3
Week 6	February 8-14 Chapter 8 Confidence Interval	HW Ch.7, Quiz 4
Week 7	February 15-21 Chapter 9 Hypothesis Testing with One Sample	HW Ch.8 Exam 2 (one hour): Chapters 5-8 (February 18)
Week 8	February 22-28 Chapter 10 Hypothesis Testing with Two Samples	HW Ch.9, Lab 2 due
Week 9	March 1-7 Chapters 11&12 Chi-Square Distribution; Linear Regression and Correlation	HW Chs.10&11, Quiz 5
Week 10	March 8-14 Chapter 12 Linear Regression and Correlation	HW Ch.12 Exam 3 (one hour): Chapters 9-12 (March 11)
Week 11	March 15-21 Chapter 13 F-Distribution and One-Way ANOVA	HW Ch.13, Lab 3 due
Week 12	March 25 Final Exam (two hours): Chapters 1-13	

- Any change in schedule is announced during class and on Canvas. Students are responsible for keeping track of schedule changes.

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.