



Math 10.05Z – Introductory Statistics
Meets: MTWTh, 10:00 AM to 12:15 PM
Online classes via Zoom

Summer 2021

Instructor: Lilit Mazmanyanyan	
Contact: mazmanyanyanlilit@fhda.edu	Office hours: On-line (email/Canvas)

This is an online class and instructional method is **synchronous**. Lectures will be delivered online via Zoom during scheduled class times. Virtual breakout rooms 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 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 required.
- Cell phones or other devices CANNOT be used in place of a permitted calculator on any quiz or examination.
- Graphing calculator, computer software Minitab or Excel can be used 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 \$50 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 • There are three (3) Laboratory assignments. • May be used graphing calculator or statistical software Minitab or EXCEL. • 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 via WebAssign or Canvas. • There are four (4) quizzes, and they are 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>Exams are timed and will be assigned via WebAssigning on the scheduled day, and they are due Saturday.</p> <p>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	June 28	First day of Summer Quarter 2021
Tuesday	June 29	Last Day for Drops w/ Refund
Wednesday	June 30	Last Day for Adds
Thursday	July 1	Last Day for Drops w/o W
Monday	July 5	Independence Day holiday, no class
Wednesday	July 28	Last Day for Drops
Thursday	August 5	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/studentsuccess/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/studentsuccess/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

	Monday	Tuesday	Wednesday	Thursday
Week 1	June 28 Syllabus/Chapter 1 Sampling and Data	June 29 Chapters 1&2 Sampling and Data & Descriptive Statistics	June 30 Chapter 2 Descriptive Statistics	July 1 Chapter 3 Probability Topics Quiz 1
Week 2	July 5 Independence Day Holiday No class	July 6 Chapters 3&4 Probability Topics & Discrete Random Variables	July 7 Chapter 4 Discrete Random Variables	July 8 Exam 1 (one hour) Chapters 1-4 Chapter 5 Continuous Random Variables
Week 3	July 12 Chapters 5&6 Continuous Random Variables & Normal Distribution	July 13 Chapters 6&7 Normal Distribution & Central Limit Theorem Lab 1 due	July 14 Chapter 7 Central Limit Theorem Quiz 2	July 15 Chapter 8 Confidence Interval
Week 4	July 19 Chapter 8 Confidence Interval	July 20 Chapter 9 Hypothesis Testing with One Sample Quiz 3	July 21 Chapter 9 Hypothesis Testing with One Sample Lab 2 due	July 22 Exam 2 (one hour) Chapters 5-8 Chapter 10 Hypothesis Testing with Two Samples
Week 5	July 26 Chapter 10 Hypothesis Testing with Two Samples	July 27 Chapters 10&11 Hypothesis Testing with Two Samples & Chi-Square Distribution Quiz 4	July 28 Chapter 11 Linear Regression and Correlation	July 29 Exam 3 (one hour) Chapters 9-11 Chapter 12 Linear Regression and Correlation
Week 6	August 2 Chapters 12&13 Linear Regression and Correlation & F-Distribution and One-Way ANOVA	August 3 Chapter 13 F-Distribution and One-Way ANOVA	August 4 Review Problems Lab 3 due	August 5 Final Exam (two hours) Chapters 9-13 10:00 AM - 12:00 PM

- Any change in schedule is announced during class. Students are responsible for keeping track of schedule changes.
- **HW** assignments can be found on **WebAssign**. They are due each Sunday.
- Course materials (syllabus, lecture presentations, quiz/exam answer keys and additional resources) are uploaded onto *Canvas*. It is accessible to you via MyPortal as you are enrolled in the course. You can also access into Canvas using direct link (<https://deanza.instructure.com>) with your MyPortal login credentials.

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.