



## Math 10.53Z – Introductory Statistics Online class

Fall 2020

<b>Instructor:</b> Lilit Mazmanyanyan	
<b>Contact:</b> <a href="mailto:mazmanyanyanlilit@fhda.edu">mazmanyanyanlilit@fhda.edu</a>	<b>Office hours:</b> Thursday, 2:00 – 3:00 PM, online via Zoom (check Canvas course for instructions)

This is an online class and instructional method is fully **asynchronous**. You can study the assigned course materials and complete the assignments via Canvas course management system and WebAssign online learning platform at your own pace by meeting weekly deadlines. You can access Canvas via **MyPortal** as you are enrolled in the course or 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 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/remotelarning](https://deanza.edu/online-ed/students/remotelarning).

### 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 and computer software Minitab are REQUIRED to complete the Laboratory assignments.

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

<b>Grading</b>	Students will be graded on homework (HW), quizzes (Q), discussions (D), laboratory work (LW), and exams (EX1, 2 & 3, FE).					
	<b>Distribution of weights for each category</b>					
	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 %			
<b>Grading Scale</b>						
			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/>

<b>Monday</b>	<b>September 21</b>	First day of Fall Quarter 2020
<b>Saturday</b>	<b>October 3</b>	Last day to add classes
<b>Sunday</b>	<b>October 4</b>	Last day to drop classes with no record of "W" Last day to drop classes for full refund or credit
<b>Friday</b>	<b>October 16</b>	Last day to request "Pass/No Pass" for full-length classes
<b>Wednesday</b>	<b>November 11</b>	Veterans Day holiday
<b>Friday</b>	<b>November 13</b>	Last day to drop classes with a "W"
	<b>November 26-29</b>	Thanksgiving holiday
<b>Monday</b>	<b>December 7</b>	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](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](http://deanza.fhda.edu/studentsuccess/mstrc/weekly_ind.html)

For group tutoring, contact to Helen at [nguyenhelen@deanza.edu](mailto: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](mailto:dss@deanza.edu)

**Tentative Schedule**

		All Assignments except Examinations are due Sunday, 10:00 PM
Week 1	Sept. 21-27 <b>Syllabus/Chapters 1&amp;2</b> Sampling and Data; Descriptive Statistics	HW Ch.1, Quiz 1
Week 2	Sept. 28 – Oct. 4 <b>Chapters 2&amp;3</b> Descriptive Statistics; Probability Topics	HW Ch.2, Quiz 2
Week 3	Oct. 5 – Oct. 11 <b>Chapters 3&amp;4</b> Probability Topics; Discrete Random Variables	HW Ch.3, Lab 1 due
Week 4	Oct. 12 – Oct. 18 <b>Chapter 5</b> Continuous Random Variables	HW Ch.4 <b>Exam 1 (one hour): Chapters 1-4 (October 16)</b>
Week 5	Oct. 19 – Oct. 25 <b>Chapters 6&amp;7</b> Normal Distribution; Central Limit Theorem	HW Chs.5&6, Quiz 3
Week 6	Oct. 26 – Nov. 1 <b>Chapter 8</b> Confidence Interval	HW Ch.7, Quiz 4
Week 7	Nov. 2 – Nov. 8 <b>Chapter 9</b> Hypothesis Testing with One Sample	HW Ch.8 <b>Exam 2 (one hour): Chapters 5-8 (November 6)</b>
Week 8	Nov. 9 – Nov. 15 <b>Chapter 10</b> Hypothesis Testing with Two Samples	HW Ch.9, Quiz 5, Lab 2 due
Week 9	Nov. 16 – Nov. 22 <b>Chapter 11</b> Chi-Square Distribution	HW Chs.10&11, Quiz 6
Week 10	Nov. 23 – Nov. 29 <b>Chapter 12</b> Linear Regression and Correlation; <b>Exam 3 (one hour): Chapters 9-11 (November 24)</b>	November 26-29 Thanksgiving Holiday
Week 11	Nov. 30 – Dec. 6 <b>Chapter 13</b> F-Distribution and One-Way ANOVA	HW Chs.12&13, Lab 3 due
Week 12	<b>December 7</b> <b>Final Exam (two hours): Chapters 1-13</b>	

Examinations 1&2 will be opened on Friday at 10:00 AM. Exam 3 and Final examination will be opened on Monday at 10:00 AM. You will have one day to complete them with time limit.

**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.