Instructor: Amanda Lien
Contact: lienamanda@fhda.edu

MATH 10: Introductory Statistics • Sec 50Z and 52Z • Summer 2023
Asynchronous Learning on Canvas

COURSE DESCRIPTION

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 (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. (5 units)

PREREQUISITE

Intermediate Algebra (Math 109, Math 114, or Math 130) or equivalent.
Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

REQUIRED MATERIALS

- Laptop/computer with working and reliable Internet
- WebAssign access code
- Scanner or camera (can be your phone's camera) to take pictures of your work
- Graphing calculator (TI-83/TI-83 Plus/TI-84/TI-84 Plus)
- Paper, pencils, erasers, colored pens, ruler/straight-edge
- Lecture notes printed/downloaded to use with each video lecture

E-BOOK (AVAILABLE WITH WEBASSIGN HOMEWORK)

- *Introductory Statistics* by Barbara Illowsky and Susan Dean, ISBN: 978-1-938168-20-8
  NOTE: This textbook is available to download for free (online or PDF) on:
  http://openstaxcollege.org/textbooks/introductory-statistics/

STUDENT LEARNING OUTCOMES

Students successfully completing this course will be able to:

• 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.

Monday, July 3	First day of summer session	
Tuesday, July 4	Independence Day Holiday	* The instructor reserves the right to adjust any due dates and times for quizzes and exams. Any changes will clearly be communicated well in advance via email.
Wednesday, July 5	Practice Homework & Quiz due at 11:00pm	
Thursday, July 6	Last day to drop with no record of grade	
Saturday, July 8	Introductions Discussion Posts due at 11:00pm Quiz #1 due at 11:00pm Quiz #2 due at 11:00pm	
Monday, July 10	Last day to add quarter-length classes	
Saturday, July 15	**Midterm #1 due at 11:00pm** Quiz #3 due at 11:00pm	* Please see the detailed calendar at the end of this syllabus for a better idea of what to expect each week.
Saturday, July 22	Quiz #4 due at 11:00pm **Midterm #2 due at 11:00pm**	
Saturday, July 29	Quiz #5 due at 11:00pm Quiz #6 due at 11:00pm	* All times listed on this syllabus are in **Pacific Standard Time**. Please convert the times accordingly if you are located in a different time zone.
Wednesday, August 2	Last day to drop with "W"	
Saturday, August 5	**Midterm #3 due at 11:00pm** Quiz #7 due at 11:00pm	
Friday, August 11	Last day of summer session Chapters 1-13 Homework due at 11:00pm Extra Credit due at 11:00pm (optional) Quiz #8 due at 11:00pm **Final Exam due at 11:00pm**	

Important: Please ignore the due dates mentioned within the lecture videos (which were recorded for a regular 12-week quarter course). Refer to this syllabus for the correct deadlines or you may refer to my weekly announcement emails for reminders.

How will we learn math online?

This course will rely heavily on the use of Canvas (https://deanza.instructure.com/). We will be learning fully online or *asynchronously*, meaning that at your own pace, you will watch video lectures, complete homework assignments, and take either a quiz or an exam **every week** this quarter. There will be set due dates for all of the homework assignments, quizzes, and exams. This 5-unit math course will take you approximately 20-30 hours per week to complete. If you know right now that you will not be able to commit to these hours, you may want to consider taking this class another time. Make-up quizzes/exams will not be offered.

I will pre-record the lessons on Zoom for each week and post the links on Canvas. Although you will be able to watch the videos at your own time and pace, you are expected to complete them in a timely manner so that you are ready to take the quiz/midterm and submit them by Saturday at 11:00pm of that week. It is very easy to fall behind in an online class, so you are encouraged to set aside at least a few hours each day to dedicate to this class as opposed to doing several hours of work in one day.

How do I access my homework assignments?

Homework will be assigned through WebAssign. You will access each homework assignment by clicking on the links on Canvas. You are permitted five (5) submissions for each problem. If you use up all five submissions, I am not able to grant extra submissions. WebAssign will mark each problem as correct (green check mark) or incorrect (red x). If you are on your third attempt and your answer is still incorrect, you should reach out to me as soon as possible to ask for help. You could also post questions in the discussion boards.

The homework will be based on the sections that I cover in the videos for each week. You should watch the videos before starting the homework as I may offer hints and tips. The links for the homework will be available to you starting Sunday of each week at 7:30am and are all due by the last day of the summer session: Friday, August 11 at 11:00pm (PST). Please note that although these assignments aren't due until the end, you should not wait until the last minute to start them. In fact, it would be better if you can get most of them done by the end of the week so that you will have practiced similar problems that may appear on your weekly quiz. Please pay careful attention to due dates. I will not accept late assignments for any reason and am not able to grant extensions.

WebAssign offers a 5-month access plan that costs $41.95 directly from their site. Since our class runs for 6 weeks (1.5 months), you should purchase the $41.95 option. You will be able to use WebAssign's trial period for free during the first two weeks of the summer session. After two weeks, you are required to purchase access so that you may continue to do the homework online. I will not be able to accept any other form of homework, so please make sure that you are able to use WebAssign if you plan to stay enrolled in this course.

How will I ask you questions if I need clarification on the homework and/or video lectures?

There are two ways for you to reach me: email and Canvas Discussion board
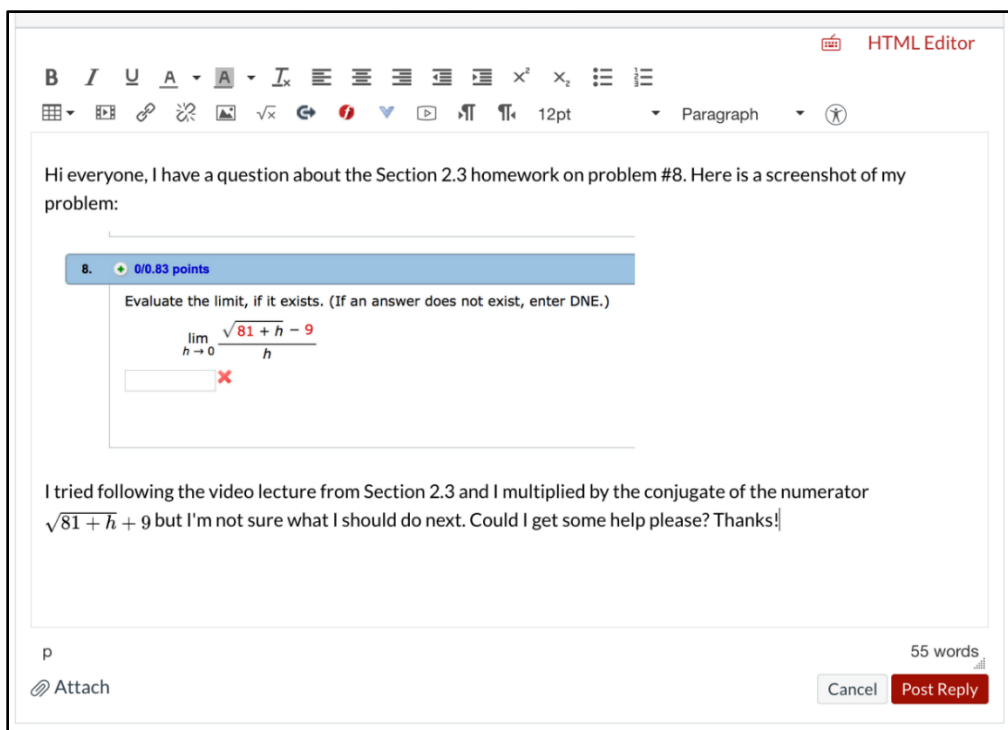
1. I check my email regularly. You are welcome to send me an email with any questions, comments, or concerns. My email is lienamanda@fhda.edu. On Monday through Thursday, you can expect to get a response from me within 24-48 hours. I may not check my email on the weekends. Please note that if you are emailing me about a *specific* homework question or clarification question about the video lectures, I may request that you post that question on Canvas Discussion (see below), especially if I think your question will benefit the learning of your fellow classmates. In that case, you will post your question on the Discussion board on Canvas, and I will answer your question there. That way, other students in the class who may have had a similar question can view the response and even add follow-up questions.

2. Since the class will be asynchronous, I wanted a way for us all to be able to chat and check in with each other as needed during the course. The best way to stay connected online will be with the use of the Discussion board on Canvas. Please try to use the Discussion board to ask me homework questions. If you email me with a question about homework, it is likely that I may ask you to post on the Discussion board anyway.

   I ask that we practice proper online positing etiquette when using the Discussion board:

   - **Be respectful to each other.** We want this to be a positive and safe learning environment where students can comfortably have a discussion and ask questions without feeling judged. We are all learning together, and these discussions serve as another form of support.
   - **Be specific.** If you have a question regarding a problem from WebAssign, please specify the problem number as well as the chapter it is from so that we can find it. Please also copy and paste the problem directly into the discussion (or take a screenshot and add it there). Mention any methods or techniques you may have tried on this problem before you got stuck. If you have a question about something from the video lectures, please specify which video and give a rough time stamp.
   - **Check to see if anyone asked a similar question before posting a new thread.** You can add follow-up questions to a preexisting thread that someone may have already started. Just click "Reply". This will keep our discussions more organized.

   Here's a good example of how you can post your questions on Canvas Discussion:

First, please locate the correct discussion thread by determining what Week # your question is from. You can also find the specific discussion board within each weekly module. This way, we can try to keep our threads organized and easier to navigate.

I am encouraging everyone to check the Discussion boards regularly. If a fellow classmate posts a question that you can answer, please do so by clicking on "Reply" on the bottom right corner of their post. I strongly believe that if you are able to explain a concept to someone else, it means that you understand the material yourself. Don't worry about making mistakes when asking or answering questions. **Mistakes are good for the learning experience.** I want us to make mistakes so that we can learn from them. If no one responds to your question after 24 hours, I will respond. For that reason, you should not wait until the day before homework is due to post questions. Post them early in the week to give everyone (myself included) enough time to answer them.

I *may* consider awarding extra credit points to students who regularly post <u>quality</u> questions and/or answers on the Discussion board. This will be decided based on how the Discussion board plays out during the course.

When and how will we take the quizzes? What will be covered on the quizzes?

We will take a total of eight quizzes this quarter that will be available to you on Sunday at 7:30am and due on that Saturday at 11:00pm of each week, with the exception of Quiz #8, which will be due on the last day, August 11. The quizzes will be taken on Canvas and can be found in that week's Module. Each quiz will consist of 10 multiple choice questions, worth 1 point each. You will not be asked to submit work, but you are strongly encouraged to have scratch paper and pencil nearby in case you need to work out the problem before selecting the answer.

The quiz will include questions based on topics that were covered during that particular week and/or the previous week. This is, again, why it is very important that you stay on track and keep up with the weekly video lectures. You are permitted to use your graphing calculator and lecture notes during the quiz. Each quiz is designed to take anywhere from 15-30 minutes to complete it. You will be given 60 minutes to complete

the quiz and the clock will start counting down as soon as you click on the "Take the Quiz" button. Please make sure that you are ready before clicking on the link. Be sure to click "Submit Quiz" at the end. After 60 minutes, the quiz will automatically be submitted on Canvas.

To ensure that you have the full 60 minutes to work on the quiz, you should start the quiz no later than 10:00pm on Saturday (though it is encouraged that you start much earlier in the week since the quiz will be available to you on Sunday at 7:30am). The quiz will close at 11:00pm on Saturday and become inaccessible. No make-up quizzes will be given for any reason.

To get an idea of how quizzes will be taken on Canvas, there will be a practice quiz for you to try in the Orientation Module during Week 1.

When and how will we take the exams? What will be covered on the exams?

There are a total of three midterms and one final exam this quarter. The midterms will be taken in Weeks 2, 3, and 5 and the final exam will be taken during on during Week 6.

Just like the quizzes, the midterms will be taken on Canvas and can be found in that week's Module. Each midterm will consist of 25 multiple choice questions, worth 2 point each. You will not be asked to submit work, but you are strongly encouraged to have scratch paper and pencil nearby in case you need to work out the problem before selecting the answer.

The midterms will be based on the previous weeks' material. That is, Midterm #1 in Week 2 will be based on the material from Weeks 1 and 2. Midterm #2 in Week 3 will be based on the material from Weeks 2 and 3. And Midterm #3 in Week 5 will be based on the material from Weeks 3 and 4. The final exam will be cumulative, covering the material from Weeks 1-6. (See calendar at end of syllabus for specific pages of lecture notes.)

Also like the quizzes, the midterms will be available to you on Sunday at 7:30am and due on Saturday at 11:00pm of that same week. See the detailed calendar at end of syllabus. You will have 120 minutes to complete the midterm and the clock will start counting down as soon as you click on the "Take the Quiz" button. Please make sure that you are ready before clicking on the link. Be sure to click "Submit Quiz" at the end. After 120 minutes, the midterm will automatically be submitted on Canvas.

The final exam will be available on Friday, August 11 from 7:30am to 11:00pm. You will have 120 minutes to complete the final and the clock will start counting down as soon as you click on the "Take the Quiz" button. Please make sure that you are ready before clicking on the link. Be sure to click "Submit Quiz" at the end. After 120 minutes, the final exam will automatically be submitted on Canvas.

What happens if I miss a quiz or a midterm? What happens if I miss a homework assignment?

There are absolutely no make-up quizzes, midterms, or homework for any reason. Please do not ask me for them as my answer will always be "no." I am choosing to hold strict/firm deadlines in hopes that it will help keep the class on track. You should start planning ahead now to set aside time for these quiz/midterm dates and homework due dates. The due dates for the homework, quizzes, and midterms are on the last page of this syllabus and they will also be listed clearly on Canvas.

I understand that life happens and sometimes we get sick, oversleep, have appointments, forget, etc. To help with this, I am dropping one (1) of your lowest quiz scores and I will also replace your lowest midterm score with your final exam score, if it is higher. You can learn more about this in the grading policy/procedure below.

What is the grading policy and procedure?

- There will be three midterms and a final, all taken on Canvas.
- If your final exam score is higher than any of your midterm scores, the final exam score (excluding any extra credit points) will be used to replace the lowest midterm score. If the lowest midterm score is a result of cheating, it will not be considered for the replacement.
- Your one (1) lowest quiz score will be dropped.
- The grades for the exams will be changed only if there is a clear error on my part, such as adding up marks incorrectly or if Canvas graded something incorrectly. Problems must be brought to my attention immediately.
- An incomplete grade (I) is rarely assigned. It will only be assigned in extreme situations (i.e. unforeseeable emergency and justifiable reason at the end of the term that prevent you from completing the course). You must be in good standing with near-perfect attendance/participation and an overall grade of a 70% (C) or greater in order to request for an incomplete grade.

Breakdown of grades:	
Homework	20%
Quizzes	20%
Midterm 1	15%
Midterm 2	15%
Midterm 3	15%
Final Exam	15%

Quarter grade:			
≥ 100%	**A+**	78-79.9%	**C+**
93-99.9%	**A**	70-77.9%	**C**
90-92.9%	**A-**	68-69.9%	**D+**
88-89.9%	**B+**	63-67.9%	**D**
83-87.9%	**B**	60-62.9%	**D-**
80-82.9%	**B-**	0-59.9%	**F**

Final grades are non-negotiable. You should monitor your scores in the Canvas Gradebook regularly throughout the quarter. If there are any discrepancies, they should be brought to my attention as soon as possible.

ACADEMIC DISHONESTY

By enrolling in this class, you agree to uphold the standards of academic integrity as outlined in the current De Anza college catalogue. Dishonesty includes but is not limited to having someone other than yourself take the course, plagiarizing, knowingly assisting another student in cheating or plagiarism, or knowingly furnishing false information to college staff, faculty, administrators or other officials. **If you are observed cheating, you may receive an F on the assignment/exam and be dismissed from the course. Furthermore, the incident will be reported to the Dean of Student Development for review and a note will be made in your school records. Please do not give me any reason to suspect cheating.**

CODE OF STUDENT CONDUCT

The college has an obligation to specify those standards of behavior essential to its educational mission and campus life. The students who are in violation of the Code of Student Conduct are subject to disciplinary sanctions which apply at all times on campus as well as to any off-campus functions sponsored or supervised by the college.

ACCESSIBILITY ACCOMODATIONS

If you have a documented disability and wish to discuss academic accommodations, or if you would need assistance in the event of an emergency evacuation, please inform me as soon as possible.

Please remember that you are accountable for your education. This means that if you are having trouble understanding a concept presented in the videos, I encourage you to ask questions on Canvas Discussion or you can email me. I am here for you and want you to be successful in this course. Do not wait until the end of the quarter to realize that you need help. Math is a hierarchical subject – it continues to build up on knowledge from previous material, so it would be to your advantage to stay on track with each week's material.

By enrolling in this course, you are agreeing to all of the policies and procedures as outlined in this syllabus.

	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Week 1: Orientation Chapters 1 and 2 Videos	Practice Homework & Quiz available at 7:30am (Mon) Introductions Discussion available at 7:30am Quiz #1 and Quiz #2 available at 7:30am Chapter 1 and Chapter 2 (part 1) homework available at 7:30am (Mon)	Independence Day Holiday		Practice Homework due on WebAssign at 11pm Practice Quiz due on Canvas at 11pm			Introductions Discussion initial and reply posts due at 11:00pm Quiz #1 due on Canvas at 11pm Coverage: Ch 1, p.1-14 of notes Quiz #2 due on Canvas at 11pm Coverage: Ch 1-2, p.15-30 of notes
Week 2: Chapters 2 and 3 Videos	Midterm #1 available at 7:30am Quiz #3 available at 7:30am Chapter 2 (part 2) and Chapter 3 homework available at 7:30am						Midterm #1 due on Canvas at 11pm Coverage: Ch 1-2, p.1-32 of notes Quiz #3 due on Canvas at 11pm Coverage: Ch 2-3, p.33-63 of notes
Week 3: Chapter 4, 5, and 6 Videos	Quiz #4 available at 7:30am Midterm #2 available at 7:30am Chapters 4-6 homework available at 7:30am						Quiz #4 due on Canvas at 11pm Coverage: Ch 4, p.64-75 of notes Midterm #2 due on Canvas at 11pm Coverage: Ch 2-4, p.33-75 of notes
Week 4: Chapter 7, 8, and 9 Videos	Quiz #5 and Quiz #6 available at 7:30am Chapters 7-9 homework available at 7:30am						Quiz #5 due on Canvas at 11pm Coverage: Ch 5-8, p.76-100 of notes Quiz #6 due on Canvas at 11pm Coverage: Ch 8-9, p.101-117 of notes

Week							
Week 5: Chapter 10, 11, and 12 Videos Extra Credit	Midterm #3 available at 7:30am Quiz #7 available at 7:30am Chapters 10-12 homework available at 7:30am Extra Credit available at 7:30am						Midterm #3 due on Canvas at 11pm Coverage: Ch 5-9, p.76-117 of notes Quiz #7 due on Canvas at 11pm Coverage: Ch 10-12, p.118-141 of notes
Week 6: Chapter 13 and Review Videos	Quiz #8 available at 7:30am Chapter 13 homework available at 7:30am				Quiz #8 due on Canvas at 11pm Coverage: Ch 13, p.142-146 of notes Final Exam available at 7:30am and due on Canvas at 11pm Coverage: Ch 1-13, p.1-146 of notes Chapters 1-13 homework assignments all due by 11pm (total of 14 assignments) Extra Credit due at 11pm (optional)	

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: