

Math 10 45Z (CRN-27544) Introductory Statistics Fall 2024
(09/23/2024- 12/13/2024)

Instructor: Neelam R. Shukla

Class Time/days: It is a synchronous class Monday, Wednesday from 6:30 pm-8:45 pm. Other than class meetings my interaction with you will be via email (inbox of Canvas), discussions, my comments for every assignment graded on Canvas, and Office hours. We will be meeting during office hours via Zoom, please feel free to ask me your questions.

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.

Required Materials:

a) T1-84 Calculators

b) Textbook: Collaborated Statistics, by Barbara Illowsky, Susane and Dean. Please do not buy hard copy.

c) Online Homework: You will have online homework on each chapter we cover on WebAssign, and you must pay \$39.95 for the quarter. The homework will be embedded within Canvas. The links and due dates are within the modules. You can request automatic extension for homework with 5% deduction of scores.

d) Course Requirements: Windows PC or laptop, Mac or MacBook, or Chromebook:

This class cannot be taken on a phone, regardless of its make or model, and cannot be taken on an iPad either.

e) Synchronous learning: Synchronous learning, online homework, quizzes, Groupworks, discussions, and exams are where you will earn 100% of your points in this class. You have 4 quizzes, 4 exams, 6 Group assignments (Groupworks), 1 Final Exam and 13 homework assignments. One least exam, quiz, and 2-homework score will be dropped at the end.

Course Content:

1. Displaying and Analyzing Data with Graphs
2. Descriptive Statistics
3. Populations and Sampling
4. Probability
5. Discrete Random Variables
6. Continuous Random Variables
7. The Central Limit Theorem
8. Point Estimation and Confidence Intervals
9. One Population Hypothesis Testing
10. Two Populations Inference
11. Chi-square Tests for Categorical Data
12. Correlation and Linear Regression
13. One Factor Analysis of Variance (ANOVA)

Office Hours:

Tuesday, 7:30 pm-8:30 pm via Zoom

Be sure to submit all first- and second-week assignments to get into the "rhythm" of the class. Please note that if you're not submitting any assignments, For, no participation, I will assume that you are not interested in the taking the class and may drop you (so you can get your refund)! If, for any reason during the quarter, you stop participating and intend to drop the class, **please do an official drop in a timely manner**. Please see the calendar for important deadlines. If you fail to do so, you will receive an "F" in the class. Follow the deadlines for this class in My Portal. I do not have the ability to make exceptions to these.

Weekly Schedule:

Every Monday and Wednesday attend the classes, read textbook, write lecture notes and watch videos, work on homework, respond to discussion boards, and study! **We will have synchronous Zoom meeting for office hours. The link can be found in the Zoom in left navigation or home page. You're expected to ask your questions, do worksheets, and take quizzes and exams.**

Chapter Discussions:

There will be a chapter-topic discussion. The due date will be at the end of the week. These topics are designed to help you think critically about statistics and express your analysis, conclusions, or opinions. They will often involve the history and practice of statistics, applications of statistics in the real world, etc.

Homework, Groupworks:

The best way to succeed in any math class is doing all the assigned work correctly and in a timely manner, making sure you really understand what you are doing! Focus on your understanding of the concept, how it relates to the course concepts and how it's applied outside of the class, not just on following a procedure or learning a skill! Time spent on the homework and worksheets will directly benefit you on quizzes and exams.

Groupwork-Worksheets:

You will have group-worksheets in almost every 2 weeks. These worksheets will usually be posted in the Canvas modules. You will work on them in groups, but you are to submit them by the deadline. They are designed to help you practice the concepts and skills you are learning together. I will look for evidence of your understanding in your work. Divide the work among your team and complete work 2-3 days prior the due date and check each other's work and help each other in case anyone is unable to complete. Write name of all the participants at the top of the google document. Anyone of you can upload the work once you are done. (Send me an on time email in case a student is not participating and co-operating with the team, then I will contact the student to inform that there could be a score deduction for that student.)

Groupwork-Worksheets Submission Guidelines:

Worksheets should be scanned and turned-on time, within 24 hours after the deadline will receive 10% penalty. After that, they will receive no credit.

Participation:

Even though this is synchronous class, you are expected to participate. Here are ways to participate:

- Ask questions in the discussion check rubric.
- Participate actively submit group-Groupwork-worksheets on-time, no extension will be given.
- Participate in assigned discussion boards (it's part of your grade) Post and answer questions in chapter discussion boards check rubric.

Quizzes:

You will have 4 quizzes (see the calendar) check dates on Canvas. You will need to submit them on time to receive any points. IMPORTANT: There will be NO MAKEUPS for any of the quizzes. However, your lowest one quiz scores will be dropped.

Exams:

You will have 4 exams. You can **skip cumulative final exam in case you take all the exams**. And average final-exam score will be calculated as (Total of four exam scores)/4. See the calendar for the dates. There will be NO MAKEUPS for any of the exams, so be sure to not miss any of them.

IMPORTANT: One of the best “average final-exam score” or “the cumulative final exam” will be picked. Final exam cannot be rescheduled for any reason. In case you are not happy with average final-exam score you can take the cumulative final exam. One least exam score, quiz score, and 2 least Homework. Scores will be dropped at the end. For online classes student-student and teacher-student interactions are must, please participate in the graded discussions and group worksheets on time. Try attending office hours for more help about the subject or homework. Frequently visit canvas shell for all updates and due dates.

Evaluation:

Discussions: 5%, Homework: 15%, Quizzes: 20 %

Cumulative-Exams: 35%, Groupwork 10%, Final Exam: 15%

Academic Integrity:

All students are expected to be academically honest throughout the term. Any instances of cheating or plagiarism will result in disciplinary action, which may include recommendation for dismissal. You are encouraged to work together but submitting someone else's work as your own is never acceptable! Also, that activity will be of no help to you later. Cheating will result in getting a 0 on the assignment or assessment, an 'F' in the course, or dismissal from the class.

Also, each incident of cheating will be reported to the Dean of the Physical Science, Mathematics and Engineering Division. Please see the De Anza College's page on Academic Integrity: https://www.deanza.edu/policies/academic_integrity.html (Links to an external site.). Also, please watch this video that's designed to help you understand what academic honesty means: <https://www.youtube.com/watch?v=4unoOe-I0eY> (Links to an external site.)

Help:

1. Your classmates are a great resource. Ask for help and provide help to others either within your current groups or using Canvas discussion boards!
2. Visit me during office hour. On online homework, you can message me by using 'Ask My Instructor' button.
3. Get help from De Anza's Math Student Success Center. See details at <http://deanza.edu/studentssuccess/> (Links to an external site.). Use NetTutor (available Groupworkle 24/7) for help through Canvas. You can also access SmartThinking through MyPortal.
4. If you need any technical help with MyPortal, Zoom, Canvas, etc., visit <https://www.deanza.edu/online-fall/#Learning> (Links to an external site.).

Disability Notice:

If you feel that you may need an accommodation based on the impact of a disability, please contact me privately to discuss your specific needs. Also, please contact Disability Support Programs & Services through <https://www.deanza.edu/dsps/> (Links to an external site.) for information or questions about eligibility, services, and accommodations for physical, psychological or learning disabilities.

Important Dates: Go to

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

Math 10 Introductory Statistics fall 2024 Tentative Calendar, please check canvas for the due dates.

Week # Synchronous class from 6:30 pm to 8:45 pm	Chapters	Assignments due
Week 1&2 (Sept 23,25,30, Oct 2)	Chapter 1,2,3	Quiz1, HW, Groupwork works
Week 3&4 (Oct 7,9,14,16)	Chapter 4,5,6	Exam1, HW, Groupwork works
Week 5&6 (Oct 21,23,28,30)	Chapter7,8	Quiz2, Exam2, HW, Groupwork works
Week 7&8 (Nov 4,6,11,13)	Chapter9&1 0	Quiz3, Exam3, HW, Groupwork works
Week 9&10 (Nov 18,20,25,27)	Chapter11& 12	Quiz4, Exam4, HW, Groupwork works
Week 11&12 (Dec 2,4, Final exam Dec 11, Wed from 6:15 pm- 8:15 pm)	Chapter13	Final Exam

Important Days:

- Sept 23: Fall classes begin.
- Oct 7: Last day to [add classes](#) .
- Oct 7: Last day to [drop classes](#) without a W.
- Oct 8: Census Day
- Nov 11: Veterans Day holiday – no classes; offices closed.
- Nov 15: Last day to [drop classes](#) with a W.
- Nov 28-Dec 1: Thanksgiving holiday – no classes; offices closed.
- Dec 9-13: [Final exams](#). **Dec 11 6:15 pm- 8:15 pm**

The professor reserves the right to make changes to the syllabus, including assignment due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.

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:

T	07:30 PM	08:30 PM	Zoom,Canvas
T	07:30 PM	08:30 PM	Zoom,Canvas