Math 10 Introductory Statistics Winter 2025– Syllabus
(CRN- 38486, Section 07)

Instructor: Neelam R. Shukla

Class Time/Days and Span

8:30 am- 10:45 am Tuesday, Thursday, in Room #G10. **(01/06/2025-03/28/2025)**

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 (Free): Introductory Statistics, 1st Edition by Illowsky and Dean.
c) Notebook, pen/pencil to write in the class.
d) Online Homework: You will have online homework on each chapter we cover on WebAssign, and you must pay $31.95 for the quarter. Please do not buy any code, click at the **first homework assignment, it will take you to the other window, follow the instructions.** 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 with in 5 days from the due date.
You will be entertained with extension on the assignments only in case you are sick, or you have a jury duty. Instructor reserves all the rights to decide that any other reason is valid or not before granted any extension requested so it is better to talk to me as soon as possible.

e) Course Requirements: Windows PC or laptop, Mac or MacBook, or Chromebook: for online assignments.
Assignments cannot be done on a phone, regardless of its make or model, and cannot be taken on an iPad either.
Face-to-face learning, online homework, quizzes, labs, discussions, and exams are where you will earn 100% of your points in this class. You have 4 quizzes, 4 exams, 4 Labs ,1 Final Exam and 12 homework assignments. One least exam, quiz, Lab, and 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

Thursday: 6:00 pm-7:00 pm via zoom, link will be available on the home page of Canvas or click at the zoom in the left bar Menu in Canvas. 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 attending the class and not submitting any assignments, 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

Read textbook (self-study), watch lecture notes, work on homework, respond to discussion boards, and study! **We will have meeting 8:30 am- 10:45 am Tuesday, Thursday, in Room #G10. We have class meetings. You're expected to attend these meetings: ask your questions, do labs, and take quizzes and exams.**

Assignments

Chapter Discussions
There will be a topic of discussion. The due date will be at the end of 3-weeks. 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 including questions related to the homework, applications of statistics in the real world, etc.

Homework, In class Worksheets

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 (in class) will directly benefit you on quizzes and exams. **You can request automatic extension for homework with 5 % deduction of scores with in 5 days from the due date.**

Labs
We will have four technology labs in this class. They will be done in groups. There will be one submission per group, with each member of the group receiving the same grade. Labs are due the day after they are

done in class. Late labs will NOT be accepted.

Participation

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

- Ask questions during the class.
- Participate actively when we do notes/labs during class sessions.
- Participate in assigned discussion boards (it's part of your grade). Post and answer questions in chapter discussion boards on canvas.

Quizzes

There will be **four** quizzes (see the calendar) online via 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. One least score will be dropped at the end.

Final Exam

There will be accumulative exam at the end. You can skip it in case you take all the exams during the quarter and a n average grade will be posted for average final exam score (average of the best 3 exams). Best score out of the average final exam score and final exam. Score will be picked at the end.

Evaluation

Labs: 10%: Discussions: 5%, Homework: 15%, Quizzes: 20 %

Cumulative-Exams: 40 %, Final Exam: 10%

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. Also, please watch this video that's designed to help you understand what academic honesty means:

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 for help with online homework or any other course related questions.
3. Ask questions during the class meetings on Tuesday, Thursday.
4. Get help from De Anza's Math Student Success Center. Use NetTutor (available 24/7) for help through Canvas. You can also access SmartThinking through MyPortal.
5. If you need any technical help with MyPortal, Zoom, Canvas help.

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 for information or questions about eligibility, services, and accommodations for physical, psychological or learning disabilities.

2025 Tentative Calendar for Math 10 class

Week #	Tuesday	Thursday
1	7th January: winter Session starts; Chapter 1	9th January: Chapter 2:
2	14th January: Chapter 2:	16th January: Quiz 1 (Chapter1 and 2)
3	21st January: (No Class) King Martin Luther's Day; Chapter 3:	23rd January: **Lab1**
4	28th January: Chapter 3; **Exam 1 (Chapter 1,2,3)**	30th January; Chapter 4:
5	4th February: Chapter 5:	6th February; Chapter 6: **Quiz 2(Chapter 5,6)**
6	11th February**; Exam2 (Chapter 4,5,6)**	13th February; Chapter 7: **Lab2**
7	18th February; Chapter 8:	20th February; Chapter 8:
8	25th February: Chapter 9: **Lab3**	27th February; Chapter 9, 10: **Quiz 3(Chapter 7,8)**
9	4th March: Chapter 10, Review	6th March **Exam3 (Chapter 7,8,9)**
10	11th March: **Chapter 12; Lab 4**	13th March Chapter 11: **Quiz 4(Chapter 10,11)**
11	18th March (No Class) President's Day Chapter 11: **Exam 4 (Chapter 10,11,12)**	20th March: Chapter 13; Review
12	25th March:	27th March: Final exam 7 am to 9 am

Note: For the exact due dates of the assignments e.g. homework, labs, discussions, quizzes and exams

check the Canvas modules. As this is a on campus class regular announcements will be delivered in the class. And exams will be held in the class. Read the late submission policy or ask me for. No retake of the exam except you are sick, Jury duty or any other valid reason (please talk to me). You can request automatic extension for homework with 5 % deduction of scores with in 5 days from the due date.

Important Dates

Go to Calendar
January 6
First day of winter quarter
January 19
Last day to add 12-week classes
January 19
Last day to drop classes without a W
January 20
Martin Luther King Jr. Holiday - no classes, offices closed
February 14-17
Presidents' Holiday - no classes, offices closed
February 28
Last day to drop classes with a W
March 24-28 Final exams

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:

W	06:00 PM	07:00 PM	Zoom,Canvas
TH	06:00 PM	07:00 PM	Zoom,Canvas