

Math 10 Course Syllabus

Introductory Statistics Section 05 - CRN 27521

De Anza College Fall 2024

On Tuesday, Thursday 08:30 AM-10:45 am at MLC260

Instructor: Jelena Segan

Email: seganjelena@fhda.edu

Office Hours: Tuesday and Thursday 11 am - 11:50 am at S55

Questions outside of office hours? I will respond to your message or email within 24 hours, Mon-Fri. If you do not get a response after 24 hours, please resend.

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.

Student Learning Outcomes:

- 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.

Textbook & Required Materials:

Inferential Statistics and Probability by Geraghty (online). (The online text is free)

Introductory Statistics by Barbara Illowsky and Susan Dean

Graphing Calculator: TI-83/TI-83+/TI-84/TI-84+

Computer/smartphone to complete assignments, participate in discussions on Canvas platform. You should keep a **notebook** where you take notes and work the problems for reference.

Prerequisites:

- MATH 114 or equivalent.
- Not open to students with credit in MATH 10H.
- Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

Canvas:

All class content, assignments and announcements will be on Canvas, which you can access through MyPortal. The course will be divided into weekly modules in Canvas. It will be updated and modified throughout this quarter.

Expectations:

Math 10 is an incredibly challenging course; be sure you put yourself in the best situation to succeed by having terrific study habits. Below is a list of tasks I recommend that you do to best succeed in this course & prepare yourself:

- Complete all homework
- Preview each lesson by skimming the lesson for 10-15 minutes before class meets

- Review your notes each day, making sure you have understood the material
- Attend office hours
- Form study groups to complete homework, study for exams
- Read the textbook
 - Read explanations
 - Work through the completed examples
 - Complete extra practice problems

Attendance: A major part of the class involves participation, discussing assignments and problems with your classmates. You are expected to attend all lectures and meet all deadlines for homework, quizzes, and discussions. We are learning a lot of different concepts that build on one another and it is very difficult to catch up if you fall behind. Time management is critical in our course.

Homework: Written sets for submission: During the quarter, I will send out homework sets to be written up and submitted in person every Tuesday. Homework is essential in any math class. You cannot expect to pass the class without putting consistent effort into homework. The deadline for submitting the homework is Tuesday at 9:00 am. Your lowest homework grade will be dropped from your final grade. This gives you some flexibility in case something comes up.

HW Guidelines: The process of solving homework problems reflected in step-by-step solutions. The following are some specific criteria:

1. Homework MUST be done in pencil.
2. Your name, class, and section number should be written at the top of the first page.
3. Work must be NEAT and ORGANIZED. Do problems IN ORDER.
4. It is important for you to SHOW YOUR WORK! You are graded on the work you show to get the final answer, not just the final answer. Be sure to show your “scratch work” that goes with the problem. Do your work underneath the assigned problem then circle your final answer.

Quizzes: Quiz dates are scheduled after we cover each chapter and these dates will be set in Canvas. The lowest quiz grade will be dropped.

Discussions and Presentation:

There will be discussion topics posted on Canvas.

Project and Presentation: We will have one project this quarter which should be completed by teams. The grade on this assignment will be the same for all members of each team.

Midterm Exams: There will be three midterm exams. Each exam includes a handwritten portion. Each midterm exam will focus on the material covered since the previous exam. More details on exam dates and procedures can be found in Canvas.

Final Exam: The final exam will cover all material from throughout the term. You will have two hours to complete the final. More details on the final exam will be available on Canvas.

Make up Policy: There are no make-up quizzes or exams for this class. All quizzes and exams must be taken on the date they are scheduled for. However, the lowest Homework, and Quiz grades will be dropped. In the case of a documented emergency, I will replace a missing Midterm score with the corresponding portion of your final grade. See the course calendar for tentative exam dates.

The final exam date and time have been determined and mandated by the college. No early/late final exam may be scheduled. No make-ups for the final will be offered. The final exam grade cannot be dropped.

Need help with this course? Student Success Center tutors are ready for you!

Tutoring: Go to <http://deanza.edu/studentsuccess> and click to join a Zoom tutoring room during open hours.

After-hours or weekend tutoring: See the Online Tutoring page <https://deanza.edu/studentsuccess/onlinetutoring/> for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

Grading policy:

Homework	180 points (22.5 %)
Quizzes	50 points (6.25 %)
Discussions	20 points (2.5%)
Project and Presentation	50 points (6.25 %)
Midterms	300 points (37.5 %)
Final	200 points (25 %)
Total	800 points

Grades:

- A 100% to 94.5%
- A- < 94.5% to 89.5%
- B+ < 89.5% to 86.5%
- B < 86.5% to 83.5%
- B- < 83.5% to 79.5%
- C+ < 79.5% to 74.5%
- C < 74.5% to 69.5%
- D+ < 69.5% to 66.5%
- D < 66.5% to 63.5%
- D- < 63.5% to 59.5%
- F < 59.5% to 0%

For detailed information on Homework, Quizzes, Project, Discussion please log into your Canvas course page.

Important Dates and Deadlines: <http://www.deanza.edu/calendar/dates-and-deadlines.html>

October 6 - Last day to add 12- week class

October 6 - Last day to drop class without W

November 15 - Last day to drop class with W.

De Anza Final exams schedule: <https://www.deanza.edu/calendar/final-exams.html>

Academic Integrity: All students are expected to exercise high levels of academic integrity throughout the quarter. You are encouraged to work together but you are expected to write up your answers independently. Any instances of cheating or plagiarism will result in disciplinary action, including getting a '0' on the assignment and report to the PSME dean, which may lead to dismissal from the class or the college

Student Honesty Policy: "Students are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal."

Disabled Services: Students who have been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorised for the current quarter. If you are not registered with DSS and need accommodations, please go to <http://www.deanza.edu/dss>.

This syllabus is subject to change at the instructor's discretion. Changes will be announced in class and on Canvas.

The following is our tentative schedule.

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
1		24 September Ch 1 – Displaying and Analyzing Data with Graphs		26 September Ch 2 – Descriptive Statistics
2		1 October		3 October

		HW 1 Due/ Ch 2 – Descriptive Statistics		Ch 3 – Populations and Samples
3		8 October HW 2 Due/ Ch 4 – Probability		10 October Ch 5 – Discrete Random Variables
4		15 October HW 3 Due/ Exam 1 / Ch 5 – Discrete Random Variables		17 October Ch 6 – Continuous Random Variables
5		22 October HW 4 Due/ Ch 7 – Central Limit Theorem		24 October Ch 8 – Confidence Intervals
6		29 October HW 5 Due/ Ch 8 – Confidence Intervals		31 October Ch 9 – One Population Hypothesis Tests
7		5 November HW 6 Due/ Ch 9 – One Population Hypothesis Tests		7 November Exam 2 / Ch 10 – Two Population Inference
8		12 November HW 7 Due/ Ch 10 – Two Population Inference		14 November Ch 11 – Chi-Square Tests / Start Project
9		19 November		21 November

		HW 8 Due/ Ch 11 – Chi-Square Tests		Ch 12 – ANOVA
10		26 November HW 9 Due/ Exam 3 / Ch 12 – ANOVA		28 November Thanksgiving holiday – no classes; offices closed
11		3 December HW 10 Due/ Ch 13 – Regression Analysis		5 December Project presentations/Final Review
12		10 December No class- finals week		12 December Final from 7 AM to 9 AM

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- 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,TH 11:00 AM 11:50 AM In-Person S55