

Course Syllabus

MATH 10 Introductory Statistics Course Syllabus

SPRING 2024

Instructor: Amelia Chan

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 fields, such as 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. This Statistics course is a required lower-division course for students majoring or minoring in many disciplines such as data science, nursing, business, engineering and others.

Objective

Upon successful completion of the course, students will be able to:

1. 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.
2. Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
3. 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.

Textbook

Elementary Statistics by Mario Triola 14th Edition. Pearson MyMathLab including etext. You can purchase directly from [PearsonLinks to an external site.](#)

Technical Requirement

- Computer, high-speed internet access, email capability
- Graphing calculator – TI-Nspire, or TI-83/84 Plus

Office Hours

- Tuesdays, 9:00-10:00 am
- Thursday 2:30-3:30 pm

You can click on Zoom in Canvas.

Important Dates

April 8 Spring classes begin
April 19 Last day to add 12-week classes
April 20 Last day to drop classes without a W
May 27 Memorial Day Weekend - no classes
May 31 Last day to drop classes with a W
June 19 Juneteenth Holiday - no classes
June 24-28 Final exams

Help

- Post your questions related to the course in the Canvas Discussion Forum. Your questions are likely to be of interest to other students.
- Ask questions during class.
- Come to office hours.
- Get help from De Anza's [MSTRCLinks to an external site.](#) for in person and online tutoring.
- Collaborate with classmates and form study groups.
- Please contact me via Canvas message regarding questions specifically for you. Please email me at chanamelia@fhda.edu *only if you can't reach me through Canvas message.*
- If you need any technical help with MyPortal, Canvas, Zoom etc., visit <https://deanza.instructure.com/courses/3382>
- Besides technical help, you may be able to get help with tech equipment, food and financial assistance, health services, resources for undocumented students, etc. Check <https://www.deanza.edu/mps/studentresources/Links to an external site.>

Grades

We will cover chapter 1-6, 7-8, 10-11 in the course.

Grades are based on:

Homework 10%
Activities 5%
Chapter Tests 10%

Quizzes 10%
Projects 5%
Midterm Exam 25%
Final Exam 35%

Grading Scale :

94% - 100% "A"
90% - <94% "A-"
87% - <90% "B+"
84% - <87% "B"
80% - <84% "B-"
77% - <80% "C+"
74% - <77% "C"
70% - <74% "C-"
67% - <70% "D+"
64% - <67% "D"
61% - <64% "D-"
0% - <61% "F"

Homework: Homework is extremely important. Your success in this class is dependent upon your ability to work and understand the homework problems. Each week there are assignments you need to complete in MyMathLab. They are due on Saturday. I will drop the lowest 4 scores. Please do not wait until the last minute to do the assignments. There is a 10 % penalty. The due dates of future homework shown in the Assignments on Canvas are tentative schedules that are subject to change. I will drop the lowest 4 scores.

Activities: Statistics is a practical course lending itself to fun activities that will both improve your understanding of the material and connect what you are learning to real life. There is a 2 points deduction for late work. I will drop the lowest score.

Quizzes: In class quiz will be given on Thursday. It is based on material taught in Monday and Wednesday classes. Quizzes are straightforward. If you have attended classes and completed the homework, you should be able to succeed. There is no make up for quizzes but I will drop lowest 2.

Chapter Tests: There will be a test at the end of each chapter in MyMathLab. All tests are closed books. This means that you cannot use the textbook, notes and resources on the internet. You are allowed to use your graphing calculator. There is a 10% late penalty. I will drop the lowest 2 test scores.

Projects: Students will collaborate in groups to analyze real-world data for statistical purposes and present their findings at the end of the quarter.

Midterm and Final Exams: There will be 2 midterms. Midterm 1 covers Ch. 1-4. Midterm 2 covers Ch. 5-7. Final exams are cumulative. All tests are closed books. This means that you

cannot use the textbooks, notes and resources on the internet. You are allowed to use your graphing calculator.

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! 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.htmlLinks to an external site.

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-l0eY>Links to an



[external site.](#)

Accommodation

If you have an accommodation from the Disability Support Programs & Services based on the impact of a disability, please contact me privately. <https://www.deanza.edu/dsps/>Links to an external site. You can contact DSPS for information or questions about eligibility, services and accommodations for physical, psychological or learning disabilities.

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	09:00 AM	10:00 AM	Zoom
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