

Class Location: G1

Instructor: Shabeena Ahmed

E-mail: ahmedshabeena@fhda.edu

Class Time: TTh 4:00PM - 6:15PM

Office Location: TBA

Office Hours: TTh 3:15PM – 3:45PM

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 (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.

Student Learning Outcomes (SLOs):

- 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.

Prerequisite: MATH 114 or equivalent with a grade of C or better; or a qualifying score on the Intermediate Algebra Placement Test within the past calendar year. **Advisory:** EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

Required Text: **Introductory Statistics**, available online or print book about \$35 in bookstore <https://openstax.org/details/introductory-statistics>.

Chapters: 1, 2, 12, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13

Class Canvas Website: [TBA](#)

Required Calculator: TI-83+ or TI-84+ calculator which should be brought to class daily. TI-89 and TI-Nspire are NOT recommended.

Grading: Grading will be determined from

Class Work/Participation/Quizzes – 10%

Written Homework – 10%

2 Projects - 10% each

2 Midterms - 20% each

Final - 20%

Grading Scale: 90-100% = A, 80-89% = B, 70-79% = C, 55-69% = D, below 55% = F. The scale might change depending on the difficulty of an exam. You have to get a passing grade for each component of grading to pass the course.

Class Work/Participation/Quizzes: 5% of the grade will be determined from class work/participation. Class work will be assigned in class and has to be completed in groups of 4 members. While classwork has to be completed in groups, they need to be submitted individually. Members will receive individual grades for the classwork. Another 5% will be determined from Quizzes, which may be either announced or unannounced. These points will be lost and cannot be made up, if you are absent from class. All handouts sent via email needs to be printed and brought to class.

Homework: Written Homework will be assigned almost every class. Each assignment & due date will be generally given at the end of handouts. Homework assigned on a day will be due one class after that day (eg. homework assigned on Tuesday will be due on Tuesday of the following week). NO late homework will be accepted and two lowest scores will be dropped to take care of any emergencies. Written homework has to be submitted in handwriting. Selected problems will be graded on correctness and the remaining will be graded on completeness. To receive full credit you must show all your steps on each problem for the written homework.

Projects: Two projects will be assigned which has to be completed in a group of 4 members. The first project will be collecting, representing, and analyzing data. And the second will be testing hypotheses using statistical procedures learned during the course, and making conclusions based on that analysis. Project should be typed and stapled WITHOUT fancy covers. While projects need to be completed in groups, they need to be submitted individually. Members will receive individual grades for the project. You have to spend a certain amount of time outside classroom hours to complete the projects.

Midterms/Final: There will be two midterms and one final exam. The *tentative* dates for the midterms are Oct 19, & Nov 16 (it is your responsibility to stay informed of any changes). The Finals is on Thursday, Dec. 14, 4:00PM – 6:00PM at G1. There will be **NO** make-up exams. In your exam paper, box answers so that it stands out from the work. You must show all steps to get full credit.

Notes for exams: ONE page of student's HANDWRITTEN notes permitted for all midterms: 8.5 by 11 inches, 2 sided. (TWO pages for final exam only.) Notes can include formulae but CANNOT include worked out problems. If your notes do not comply with requirements, they will be taken away and you will take the midterm or final with NO notes.

Prepare for exams early: Start studying for exams several days early. Understand and have a complete grasp of a concept early on. Students who work on a regular basis and don't let work pile up are more likely to succeed on exams.

How to get help: Don't wait until you're drowning to ask for help! Students are encouraged to visit me during my office hours for help.

Math Tutorial Center: (S-43) has FREE TUTORING for MATH 10. Drop in tutoring is available daily. Ask in the Tutorial Center about the availability of individual weekly tutoring.

Classroom Expectations: The use of cell phones and other electronic items are not allowed during class. Cell phones must be turned OFF. It is expected that students are respectful and contribute to a learning environment in the classroom.

Add/Drop Policy: It is the responsibility of the student to withdraw from a class prior to the published deadline in order to insure that a penalty grade will not be awarded.

Cheating Policy: A student caught cheating will receive a 0% for that exam or assignment. Cheating includes, but is not limited to: using unauthorized notes, books or formulas during an exam, sharing calculators, looking at another student's exam or allowing another student to look at your exam or copying homework solutions. A student who is caught cheating repeatedly will receive an F for the course.

Accommodations: Please see me during office hours to discuss your situation confidentially if you have accommodations; you should see me during the first week of class or as soon as you receive approval from the appropriate support service. For information about eligibility, support services or accommodations due to physical or learning disability see:

- Disability Support Service (DSS): Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): Location: LCW 110; (408) 864-8839
- Special Education Division: (408) 864-8407, www.deanza.edu/specialed

Syllabus disclaimer: The instructor may make changes to the syllabus during the quarter. Students will be notified of the changes either in class or via email.

Important Dates:

Sept. 26, Tue	Classes begin
Oct 5, Th	Start Project I
Oct. 7, Sat	Last day to ADD
Oct. 8, Sun	Last day to DROP for a full refund or credit/with no record of grade
Oct 19, Th	Midterm I
Oct. 20, Fri	Last day to request pass/no pass grade
Oct 26, Th	Project I Due
Nov 9, Th	Start Project II
Nov 16, Th	Midterm II
Nov. 17, Fri	Last day to drop with a "W"
Nov 23, Th	Thanksgiving Holiday
Nov 30, Th	Project II Due
Dec 7, Th	Classes end
Dec. 14, Thursday, 4:00PM – 6:00PM,	Final Examination at G1
Dec. 15, Fri	Last day to file for a fall degree or certificate