De Anza College – Fall 2019 MATH 10-17 Introductory Statistics

Instructor: Paul Du, PhD E-mail: dupaul@fhda.edu Class: MTWThF 12:30 pm – 1:30 pm, Room E31 Office Hours: MW 11:20 am – 12:20 pm, Room S43

Prerequisite

MATH 114 or equivalent with a grade of C or better.

Course Materials

- Course Notes (Required)
- References:
 - 1. *Introductory Statistics*, OpenStax. (Open Source Textbook: https://openstax.org/details/ introductory-statistics)
 - 2. *OpenIntro Statistics*, 3rd Edition. (Open Source Textbook: https://www.openintro.org/ stat/textbook.php?stat_book=os)

Calculator

A TI-84 Plus or TI-84 Plus graphing calculator is required. Cell phone calculators will not be allowed on exams or quizzes.

Statistical Software

We will be using R Commander for statistical analysis of large data sets. R Commander is a graphical user interface for R, an open-source, powerful statistical computing and graphics environment. See a separate handout for the installation instructions and other resources on R and R Commander. Students are encouraged to bring a laptop installed with R and R Commander to class.

Homework and Quizzes

Homework will be assigned for each lesson and will be due on each exam day. Students are responsible for solving all the problems assigned, showing all work in a neat and orderly manner. Simply giving answers without showing work will receive no credit. Homework will be graded on neatness, completeness, and correctness. Late homework will be accepted but will receive a maximum of half credit.

Homework Assignment Requirements: The assignments must be printed out and completed on standard letter size paper, stapled together, and in pencil or black/blue pen. The first page must be a cover page that contains the student name and a homework completion checklist. Any homework that does not follow the assignment requirement will not be collected or will cause significant points to be deducted.

There will be two (2) data analysis mini-projects. Students will work as a group of two to three in using R to conduct data analysis and writing a short report. Detailed information will be provided when the projects are assigned.

There will be five (5) quizzes given throughout the quarter. Quiz problems will be similar to (or taken directly from) the homework. The lowest quiz score will be dropped. There will be **no make-up quizzes under any circumstances**.

Exams

There will be two (2) midterm exams given during the quarter. Students may bring one $3'' \times 5''$ index card (two-sides) of handwritten notes to each midterm exam. The lowest midterm exam score will be replaced by the final exam score, if the latter is higher. There will be **no make-up midterm exams under any circumstances**.

A mandatory comprehensive final exam will be given at the end of the quarter. Students may bring one $8.5'' \times 11''$ sheet (two sides) of handwritten notes to the final exam. A picture ID is required to take the final exam. Any student who **misses the final exam will receive a grade of F** for the course.

Grading Policy

The course grade will be determined by the following criteria:

Homework 10%	[99%, 100%]	=	A+	[80%, 82%)	=	B-
Mini-Projects10%	[92%, 99%)	=	А	[77%, 80%)	=	C+
Quizzes 10%	[90%, 92%)	=	А-	[70%, 77%)	=	С
Midterm Exams40%	[87%, 90%)	=	B+	[55%, 70%)	=	D
Final Exam	[82%, 87%)	=	В	[0%, 55%)	=	F

Attendance Policy

Students are expected to attend all classes, to be on time and to stay for the entire class period. Any student who misses more than one (1) class during the first two weeks or more than three (3) classes before the withdraw deadline may be dropped by the instructor. If a student decides not to continue with the course, it is the student's responsibility to officially drop the course. Failure to do so may result in a grade of F for the course.

Academic Honesty

Students are responsible for keeping themselves informed of the De Anza College Policy on Academic Integrity (www.deanza.edu/studenthandbook/academic-integrity.html). Cheating will not be tolerated and can result in receiving a zero on the exam or an F for the course up to being reported to the Dean of Students Office for possible disciplinary action.

Student Conduct and Classroom Behavior

Students are responsible for keeping themselves informed of the De Anza College Student Code of Conduct (www.deanza.edu/dsps/dish/appendix/conducts.html). Disruptive classroom behavior is unacceptable. Examples of such behavior include, but not limited to, talking during lecture and student presentation, making distracting noises, or arriving to class late or leaving early. Persistent disruption can result in being asked to leave the class and/or being referred to the Dean of Students Office.

Accommodations for Students with Disabilities

Students with disabilities who believe that they may need accommodations in this course are encouraged to contact Disability Support Services (408-864-8753) or Educational Diagnostic Center (408-864-8839) as soon as possible to ensure that such accommodations are arranged in a timely fashion.

Additional Help

If you find yourself falling behind or find any topics difficult to understand, seek help immediately!

- Math and Science Tutorial Center (S43) provides free group and individual tutoring.
- Khan Academy (https://www.khanacademy.org) provides good online self-study videos.

Hints for Success

- ► Participate actively in class.
- ► Work problems every day.
- ► Review old material constantly.
- ► Form a study group.
- ► Utilize tutoring and online resources.

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 defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.