READ THROUGH THIS ENTIRE SYLLABUS SO THAT YOU ARE FAMILIAR WITH THE CLASS AND ITS MANY DETAILS.

Winter 2023

This is a demanding, but rewarding class. If you cannot commit to a minimum of 15 hours per week of study and group work, then you should take this class in a quarter when you have more time to learn. This is also a collaborative class. You will be expected to work with your classmates both inside and outside of class.

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, the sciences, and other related fields

- Attendance: You are expected to attend all classes. Tardy counts as half an absence. You are considered tardy if you come to class after the attendance has been taken. Also leaving the class early will count as half an absence. If you accumulate five absences you will be dropped from the class. Please inform me by email if you are going to be absent and the reason for it. YOU MUST BE IN CLASS EVERY DAY FOR THE FIRST TWO WEEKS OF CLASS OR YOU MAY BE DROPPED. ANYONE WHO DOES NOT COMPLETE THE FIRST ASSIGNMENTS WILL BE DROPED
- **Text:** The textbook for this course is the Introductory Statistics from OpenStax and is available for **FREE**at: <u>http://openstaxcollege.org/textbooks/introductory-statistics</u> You can use the book online or download a pdf file or just access it through the webassign (cengage)

Related Materials1) A graphing calculator is required: TI 84 or TI-84+. You may use a TI83 or TI 83+ if you already have one
2) You need to print a chapter material course each week, available on Canvas.

- Homework: The Homework is mandatory. The Homework will be available and graded online at WebAssign (http://cengage.com). You will need to purchase a code to access the Webassign homework. The lowest score will be dropped. The class key is: deanza 1753 4581
- **Quizzes:** Many quizzes will be given through the quarter. <u>The lowest quiz grade will be dropped</u>. No make-ups are given. Some quizzes will be on Webassign and some will be in class.
- Labs: Labs make use of the TI graphing calculator. The labs will be done in groups of up to four members. Turn in one copy with all of the group members' names on the top.
- **Project:** One project is assigned for the quarter. You will collect data and perform a statistical study. You can work with partners up to four members. Turn in one paper with the names of all partners in the group.
- **Exams:** Three exams will be given. Each exam is multiple choices and worth 50 points. Exams will be taken in classroom only. Bring a Green Scantron available at the bookstore. Students may bring 1 page of notes front and back.

Final Exam:** A two-hour comprehensive exam will be given. If you miss the final exam, you will receive an F for the course. Bring a Score Sheet (green scantron). Students may bring 2 pages of notes to the final. Finals must be taken at scheduled time during finals week.

** The final exam counts as two test exams. Therefore they are like five exams and the lowest exam score will be dropped.

Grading system

Homework	50pts	A+:	96% and above	A: 89%-95%
Quizzes	60pts	B+:	85%-88%	B: 79%-84%
Exams	100pts	C+:	76%-78%	C: 68-75%
Final**	100pts	D:	60-67%	
Project	50pts	F:	below 60%	
Labs:	20pts			
TOTAL:	380p ts			

Topics to Skip

- Ch 3: Venn diagrams
- Ch 4: Geometric, Hypergeometric, Poisson Distributions
- Ch5: Conditional probability for Uniform distribution
- Ch 7: Central Limit Theorem for Sums
- Ch 11: Test of variance
- Ch 13 Test of two variances

Miscellaneous

Chapter videos and podcasts to download are available on Barbara Illowsky's web site: <u>http://faculty.deanza.edu/illowskybarbara/</u>

Paperss must be turned in on the due date. They may be turned in earlier, but THEY WILL NOT BE ACCEPTED LATE.

SUDENTS SERVICES

<u>Free Tutoring</u>: I strongly encourage you to utilize this resource. More information can be found here: <u>http://www.deanza.edu/studentsuccess/mstrc/</u>

<u>Disability Support Services</u>: If you need to contact the Disability Support Services, then please contact them as soon as possible. More information can be found here:

https://www.deanza.edu/dsps/

<u>Academic Integrity:</u> This is pretty straightforward: Do not cheat on quizzes, exams, or directly copy other student's work. It is not worth getting caught and suffering the consequences. For more information about De Anza College's policy on academic integrity:

https://www.deanza.edu/policies/academic_integrity.html

<u>Student Services</u>: This web site leads you to information about financial aid, child care, counseling, academic support, disability support, student activities, and other services that are here for you. The physical location for most of these services is in the Student Community Services Building.

http://www.deanza.edu/studentservices

The last day to add is **January 21st 2023** The last day to drop with no record is **January 22nd 2023** The last day to drop with a W is **March 3rd 2023**

Below is a tentative schedule for the course. I may need to make some changes if needed by removing assignments or adding assignments depending on the progress we will make through the quarter.

	MONDAY		TUESDAY		WEDENESDA	Y	THURSDAY		FRIDAY	
JAN		9		0		11		12		13
	Instruction	-	-	-				_	Quiz CH1	
	Begins Ch1		Ch1		Ch1		Ch1			
JAN		16	1	17		18		19		20
	MLK		Ch. 2		Ch. 2		Ch. 2		Quiz CH2	
	No Class									
JAN		23	2	4		25		26		27
	Ch. 3		Ch. 3		<u>Start Project</u>		Ch. 3		REVIEW	
					Ch. 3					
JAN		30	3	31		1		2		3
/	EXAM 1		Ch. 4		Ch. 4		Ch 4		Lab Ch4	
FEB	Ch. 1, 2, 3						Lab Ch4		continued	
FEB		6		7		8		9		10
	Ch. 5		Project: Data Chec	k	Ch 6		Ch 6		Quiz CH5	
			Ch. 5						-	
FEB		13	1	4		15		16		17
					REVIEW		EXAM 2		President day	
	Ch. 7		Ch. 7				Ch 4, 5, 6, 7		No Class	
FEB		20	2	21		22		23		24
	President day	y	Ch. 8		Ch. 8		Ch. 8		Lab Ch8	
	No Class				Proj: Graph Check		Lab Ch8		continued	
FEB		27	2	28		1		2		3
/	Ch. 8		Ch. 9		Ch. 9		Ch. 9		Quiz CH9	
MAR										
MAR		6		7		8		9		10
	Ch. 9		Ch. 10		Ch. 10				Quiz CH10	
					Project due		REVIEW			
MAR		13	1	14		15		16		17
	EXAM 3		Ch. 11		Ch. 11		Ch. 12		Quiz CH11	
	Ch 8,9,10									
MAR		20	2	21		22		23		24
	Ch. 12		Ch. 13		Ch. 13		Final Review		Quiz CH13	
MAR		27	2	28		29		30		31
					Final Exam					
					7-9am					

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.

Office Hours:

W,TH 09:30 AM 10:20 AM In-Person E37