De Anza College Syllabus for Elementary Statistics

Math 10: *Elementary Statistics*, CRN: 01255 Winter 2018

Instructor	Office	Phone	E-mail	Class days/Time	Office Hours*
				Monday/wednesday 1:30pm 3:45 pm	
Neelam R. Shukla	E 37		Shuklaneelam@fhda.edu		MW 1215-1315

This is a demanding, but rewarding class. It will take a minimum of 10 hours per week of study and group work. This is also a collaborative class. You will be expected to work with your classmates both inside and outside of class (no exceptions).

Textbook: Text: **Collaborative Statistics, 2nd Edition by Illowsky and Dean**
This text is available for free downloading at: http://cnx.org/contents/5e0744f9-9e79-4348-9237ed012213a2d6@40.9:15/Collaborative_Statistics You may download the text for free onto your computer and print out the pages you want. (Note: If you plan on printing the entire book, please see Herminio to borrow a copy of the text.)

Materials: **TI84 or TI-83 PLUS** graphing calculator (see www.rentcalculators.org to rent a calculator for $9 per month);
Math 10 Worksheet Packet: available for purchase at the bookstore.
Ruler, small stapler.

Instructor Web site: **http://faculty.deanza.fhda.edu/mathiosdiane/**

Quizzes: Quizzes and group quizzes are closed book and with one page of handwritten notes (one side) allowed. Quizzes will test your understanding and completion of the homework problems. **Your lowest quiz grade will be dropped.** ***No make-ups are given.*** 15%

Labs: Lab assignments make use of the calculator. 10 %

Homework: The purpose of homework is to help you learn the material in the course. **Do the practices first**. We will usually start them in class. They must be turned in with your HW. Then do the HW problems assigned. The answers are at the end of each chapter. You must show your work for all HW problems. Graphs must be done with a ruler. No credit will be given for answers only. **Each student may turn in a HW assignment one day late ONCE during the quarter. Other than this, no late HW will be accepted. Your lowest HW score will be dropped.** 10%

Exams: 5 exams will be given. ***No make-ups are given.*** Exams are closed book. Students may bring to the exam one 8 ½" x 11" page (both sides) of **handwritten** notes, a calculator, and, if English is a second language, an English translation dictionary. *One minimum score will be deleted.* *30%*

Final Exam: A two-hour comprehensive exam will be given. Students may bring 2 pages (both sides) of handwritten notes to the final. ***Finals must be taken at scheduled time during finals week.*** 25%

Attendance: You are expected to attend all classes and be punctual.

Projects: There are 2 projects. Projects are done in groups and make use of data collected by the group. ***No make-ups or late papers will be accepted.*** ***10 %***

Labs, homework and projects are due by the start of class on the due date and next day. ***They may be turned in earlier, but THEY WILL NOT BE ACCEPTED LATER than one day.***

Topics to Skip

Ch 3: Venn diagrams
Ch 4: Poisson, Geometric, Hypergeometric Distributions
Ch 5: Uniform, Exponential Distributions
Ch 7: Central Limit Theorem for Sums
Ch 11: Test of One Variance
Ch 13: Test of Two Variances

- **Dates for Exams and quizzes**: Exam 1: 18th Jan
- Exam 2: 30th Jan
- Exam 3: 15th Feb
- Exam 4: 6th March
- Exam 5: 20th March (leave 1 exam with least score)

• Grade Breakdown: 90-93 % A-, 94−100% = A, 80-83 B-, 84−86% = B, 87-89 B+ 70−75% = C. 76-80% C+, 60-69% D. below 60% = F.

8,10 Jan	Quiz 1 /Chapter 1 Sampling and Data, Descriptive Statistics	
15,17 Jan	Exam 1 Descriptive Statistics; Probability Topics	Exam 1
22,24 Jan	Probability Topics; Discrete Random Variables Quiz 2	
29 Jan 31 Jan	, Exam 2 Continuous Random Variables	Exam 2
5,7 Feb	Normal Distribution; Central Limit Theorem Quiz 3	
12,14 Feb	Confidence Interval Exam 3	Exam 3 (Thursday)
19,21 Feb	Hypothesis Testing with One Sample	
26 ,28 Feb	Hypothesis Testing with Two Samples Quiz 4	
5,7 March	Chi-Square Distribution Exam 4	Exam 4 (Tuesday) chapter 5
12,14 March	Linear Regression and Correlation Quiz 5	……
19, 21 March	F-Distribution and One-Way ANOVA Exam 5 review	Exam 5 (Tuesday) Chapter 7,8
26 March Monday	Final Exam	**Final Exam: 1:45 pm -3:45 pm**

- **IMPORTANT DATES: Monday, Jan. 8** :: First day of Winter Quarter 2018**.**

- **Saturday, Jan. 20** :: Last day to add quarter-length classes. *Add date is enforced.*
- **Sunday, Jan. 21** :: Last day to drop for a full refund or credit (quarter-length classes)**.** *Drop date is enforced.*
- **Sunday, Jan. 21** :: Last day to drop a class with no record of grade. *Drop date is enforced.*
- **Friday, Feb. 2** :: Last day to request pass/no pass grade. *Request date is enforced.*
- **Friday, March 2** :: Last day to drop with a "W." *Withdraw date is enforced.*
- **Monday, Jan. 15** :: Holiday: Observance of Martin Luther King's Birthday
- **Friday-Monday, Feb. 16-19** :: Holiday: Presidents' Day Weekend (no classes)
- **March 26-30**:: Final Exams

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.