## Syllabus for Elementary Statistics

Math 10-sec 01: ID 01209 Elementary Statistics, Spring 2019

| Instructor | Office | Phone | E-mail | Class days/Time | Location Office Hours* |  |
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|  |  |  |  |  |  |  |
| Neelam R. | E 37 | $408-913-$ | Shuklaneelam@fhda.edu | MTWThF | G5 | MTWThF 8:30 am-9:00 |
| Shukla |  | 5225 |  | 7:30 am 8:20 am | am |  |
|  |  |  |  | E 37 |  |  |

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, 1st Edition by Illowsky and Dean
https://openstax.org/details/introductory-statistics
This text is available for free downloading at You may download the text for free onto your computer and print out the pages you want.

Materials: $\quad$ TI84 or TI-83 PLUS graphing calculator (see www.rentcalculators.org to rent a calculator for $\$ 9$ per month);
Work Sheets
Ruler, small stapler.

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. 20\%

Labs: Projects: 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. Student may turn in a HW assignment one day late during the quarter. Late HW will be accepted by reducing the credit. $10 \%$

Exams: 4 exams will be given. No make-ups are given. Exams are closed book. Students may bring to the exam one $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ page (both sides) of handwritten notes (only Formulae), a calculator, and, if English is a second language, an English translation dictionary. One minimum score will be deleted. 35\%

Final Exam: A two-hour comprehensive exam will be given. Students may bring 2 pages (both sides) of handwritten notes (Formulae only) 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 Homeworks are due on the due date or next day and next-2 day with credit reduction. They may be turned in earlier, but THEY WILL NOT BE ACCEPTED LATER than three days.

## - Dates for Exams and quizzes:

- Exam 1: April 19
- Exam 2: May 2
- Exam 3: May 31
- Exam 4: June 19

Quiz 1: April 12
Quiz 2: April 26
Quiz 3: May 16
Quiz 4: June 7

One least score of quiz and exam will be dropped.

- Grade Breakdown: $90-93 \% \mathrm{~A}-, 94-100 \%=A, 80-83 \mathrm{~B}-, 84-86 \%=B, 87-89 \mathrm{~B}+70-75 \%=\mathrm{C} .76-80 \% \mathrm{C}+, 60-69 \% \mathrm{D}$. below $60 \%=F$.

| 8-12 April | Chapter 1 Sampling and Data, <br> Descriptive Statistics group-Quiz <br> 1(chap 1) |  |
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| 15-19 April | Descriptive Statistics; <br> Probability Topics | Exam 1 ( Chap 1,2) LAB 1 |
| 22-26 April | Probability Topics; Discrete <br> Random Variables Quiz 2(Chap <br> $3,4)$ |  |
| 29, 30 April 1-3 May | Continuous Random Variables | Exam 2 ( Chap 3,4,5) LAB 2 |
| 6-10 May | Normal Distribution; Central <br> Limit Theorem |  |
| 13-17 May | Confidence Interval Group <br> Group-Quiz3 (Chap 6,7) | LAB 3 |
| 20-24 May | Hypothesis Testing with One <br> Sample |  |
| 27-31 May | Hypothesis Testing with Two <br> Samples | LAB 4 Exam 3 (Chap 7,8,9) |
| 3-7 June | Chi-Square Distribution, Linear <br> Regression and Correlation | Quiz 4( Chap 10) |
| 10-14 June | F-Distribution and review | LAB 5 |
| 17-21 June | One-Way ANOVA | Exam 4(10,11,12) |
| 24-28 June Final Week | Final Exam | Final Exam: Monday 7-9 am |

Important dates: APRIL 8 First day of Spring Quarter
APRIL 20 Last day to add classes
APRIL 21 Last day to drop classes with no record of "W"
May 3 Last day to request "Pass/No Pass"
MAY 27 MAMORIAL DAY - Campus Closed
MAY 31 Last day to drop classes with a "W"
JUNE 24-28 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.

