SOUTH FLORIDA STATE COLLEGE DIVISION OF ARTS AND SCIENCES COURSE SYLLABUS

Semester STA 2023 Elementary Statistics (3 credit hours)

Instructor:	Phone:
Office Location:	Email:
Office Hours:	

Welcome:

Welcome to Elementary Statistics. This should be a fun course that will help you recognize the usefulness of mathematics and provide you the ability to think, solve problems and learn how to learn. Business and industry leaders listed those three abilities as the more critical requirements for employment and career advancement.

Catalog Description:

This is a study of fundamental statistical methods including organization, analysis and interpretation of numerical data, measures of central tendency and dispersion, statistical distributions, sampling techniques, hypothesis testing, probability, z-tests, chi-square tests, correlation, and regression equations. You will be required to demonstrate skills and understanding of statistical topics through multiple assignments and assessments and must earn a grade of C or higher in this course. A scientific calculator is recommended.

Course Specific Outcomes:

Upon successful completion of this course, you should be able to:

- 1. identify types of variables including qualitative, quantitative, discrete, and continuous;
- identify sampling techniques;
- 3. collect, organize, tabulate, and graph numerical data;
- 4. calculate the mean, median, mode, range, variance, and standard deviation of a set of numbers:
- 5. calculate the mean, modal class, variance, and standard deviation of a frequency distribution;
- 6. find measures of position such as percentiles, quartiles, or standard scores;
- 7. find the probability value of an event or sequence of events;
- 8. solve problems involving combinations and permutations;
- solve problems involving various distributions including binomial and normal;
- 10. explain sampling theory including large and small sample methods;
- 11. test hypotheses;
- 12. use the correlation coefficient to determine whether two variables are related;
- 13. do regression analysis;
- 14. test a distribution for goodness of fit;
- 15. test two variables for independence; and

16. use one-way analysis of variance (ANOVA) to test the difference between three or more means.

Prerequisites:

Designated score on college entrance exam or placement test, or MAT 1033 with a grade of C or higher

Required Course Materials:

Elementary Statistics, 10th edition, by Allan G. Bluman. ISBN: 9781259755330
Scientific calculator

Instructional Methods:

Reading assignments, lecture notes, practice assignments, quizzes, tests, projects (Honors only) and exams

Course Resources:

Tutor.com - access to free online tutoring through Brightspace Math Lab - free math tutoring and assistance with assignments; located on the Highlands campus

Class Attendance and Tardy Policy:

Attendance is vital to success in this course. Ideally, you should attend all classes. Tardiness and early-outs are also very detrimental to your work and disruptive to other students' concentration. Students with excessive absences, tardies, and /or early-outs may be withdrawn from the class. Be aware that a withdrawal in any course may impact your financial aid or scholarship status. In the event of an absence, you are required to cover the day's lesson.

Course Requirements:

<u>Assignments</u>- Exercises will be assigned for each section of the textbook that is discussed in class. The purpose of these assignments is to help you develop an understanding of the concepts discussed. It is your responsibility to keep up with assignments even in cases of absences.

Quizzes- Occasionally, quizzes will be given at the start of a class meeting. No make-ups will be given.

<u>Tests</u>- Tests will be given during the semester to determine your level of understanding. No make-ups will be given. A missed test will be assigned a grade of '0'. **See course calendar for dates.**

<u>Final Exam</u>- An optional final examination will be given at the end of the semester. This exam will serve as a replacement grade for any student wishing to replace a low or missing test score. See course calendar for specific date and time.

Grading:

The semester grade can be computed by adding the points you have earned from homework assignments, quizzes, and tests, then dividing by the total number of points possible.

Grading for assignments, quizzes, tests and exams may vary for each instructor teaching the course.

Grading Scale:

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90 - 100\% = A

80 - 89.99\% = B

70 - 79.99\% = C

60 - 69.99\% = D

0 - 59.99\% = F
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DISCLAIMER: Course policies, procedures, and schedule may be changed at any time at the discretion of the instructor. You will be advised of any changes in writing.