

Jamestown Community College

MAT 1540: Elementary Statistics

Course Syllabus

Instructor Todd Christopher
Classroom Room 129
Phone 375-6600 EXT 2129
Email tchristopher@alli.wnyric.org

Course Description

Students will discuss topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability random sampling, correlation and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. A significant part of the course is taught in a laboratory setting using a software package such as Minitab and/or a TI83+ graphic calculator.

Course Rationale

MAT 1540 presents basic topics in statistics. Upon successful completion of the course, students should be able to make decisions using statistics and model real-life situation. Students will develop logical and problem solving skills as well as the ability to better understand data.

Prerequisites

MAT 0600 or MAT 1500, two years of high school algebra/geometry.

Required Text

Fundamentals of Statistics, 2nd Edition, by Michael Sullivan III. ISBN 0131569872
(the text is available online only)

Topical Outline

Chapter 1: Data Collection
Chapter 2: Organizing and Summarizing Data
Chapter 3: Descriptive Statistics
Chapter 4: Correlation and Regression
Chapter 5: Probability
Chapter 6: Probability Distributions
Chapter 7: Normal Probability Distributions
Chapter 8: Sampling Distributions
Chapter 9: Confidence Intervals
Chapter 10: Hypothesis testing with One Sample

Additional Topics (as time allows)

Confidence Intervals for variance, and standard deviation

Hypothesis testing (with one sample) for variance, and standard deviation

Hypothesis testing (with two samples) for mean, proportions, variance, and standard deviation

Grading

Your final grade will be determined based on the following:

1 st Qtr average	20%
2 nd Qtr average	20%
3 rd Qtr average	20%
4 th Qtr average	20%
Final Exam/Project	20%

Quarter averages for each student will be determined by adding up all the points the student received and dividing by the points the student could have received.

Tests = 100 points each

Quizzes = 50 points each

Homework = 10 points each

Projects = 100 pts each

Grade Scale

90-100%	A
86-89	B+
80-85	B
76-79	C+
70-75	C
66-69	D+
60-65	D
0-59	F