# Jamestown Community College

State University of New York Statistics (MAT 1540) CRN#4666

**2024 – 2025** 

Room 129 Mrs. Haynes

**CONTACT INFORMATION** 



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### **COURSE DESCRIPTION**



3 credit hours

The textbook for this course is found online using the website <a href="http://openstax.org/subjects">http://openstax.org/subjects</a>

Students will investigate various 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.

Prerequisite: Algebra II Regents Score (and final course average) of 80+

or ACCUPLACER QAS score of 255+

or meets eligibility requirements for any higher-level math course

#### **COURSE STUDENT LEARNING OUTCOMES**

Students who demonstrate understanding can:

- 1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics.
- 2. Represent mathematical information symbolically, visually, numerically and verbally.
- 3. Employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems.
- 4. Estimate and check mathematical results for reasonableness.
- 5. Recognize the limits of mathematical and statistical methods.

## **GRADING SCALE CALCULATIONS**

Tests: 50% Quizzes: 25% Homework: 25%

#### **GRADING SCALE (JCC equivalents)**

Α	(90 – 100)	С	(70 - 76)
B+	(87 – 89)	D+	(67 - 69)
В	(80 – 86)	D	(60 - 66)
C+	(77 - 79)	F	<b>LESS THAN 60</b>

#### **TOPICS COVERED**

Sampling and Data Collection Organizing and Summarizing Data Descriptive Statistics

Stem-and-Leaf plots, Bar graphs, Line graphs, histograms, Box Plots Measures of central tendency, Skewed data, measures of spread of the data Probability

Independent events and mutually exclusive events, tree and Venn diagrams Discrete and Random Variables

Probability Distributions, standard deviation
Continuous Random Variables
Normal Distributions
The Central Limit Theorem
Confidence Intervals
Hypothesis Testing with One Sample
Correlation and Linear Regression

If time permits, any (or all) of the following topics may be introduced binomial distribution, normal approximation to binomial distribution, distribution of sample proportion, confidence intervals for a proportion, hypothesis testing for a proportion, and two-sample tests.

# **Expectations of JCC students**

Civility Statement: http://www.sunyjcc.edu/current-students/classroom-civility

Student Responsibility Statement: <a href="http://sunyjcc.edu/student-life/campus-life/student-responsibilities">http://sunyjcc.edu/student-life/campus-life/student-responsibilities</a>

Academic Integrity: http://www.sunyjcc.edu/current-students/academic-integrity

#### **CLASSROOM POLICIES**

- Homework will be given every class. However, it is probable that the assignments will not be graded. 1. Homework completion is necessary for practice of concepts and preparing for assessments. If an assignment is to be graded the students will be notified beforehand. NO LATE HOMEWORK WILL BE ACCEPTED.
- 2. If a student is absent from school, he/she is still responsible for getting any missed notes or handouts.
- If a student is absent from school, he/she may make up a missed quiz/test ONLY if the absence was 3. coded as EXCUSED. No makeup assessments will be given for unexcused absences.
- 4. Cell phone use is prohibited during class time.
- 5. There will be up to 10 exams given, up to 10 guizzes given, a midterm exam, and a final exam.
- 6. Occasionally extra credit will be available. This is completely at the teacher's discretion.
- 7. Daily required materials: book, pencil, pen, eraser, 3- ring binder and TInspire calculator.
  - (TI-nspire graphing calculators are issued to each student just like a textbook. Please see the accompanying letter)
- My free periods are: 5, 6, and 8. I can also be available for extra help after school. All you need to do is 8. let me know when you'd like to stay.

Sign, detach along dotted line, and return	
STUDENT FULL NAME:	
(please print)	
	- <b>f t</b> :
I have read and discussed with my child the ir regarding JCC (MAT 1540) STATISTICS class	
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parent signature	date