

MATH 11 – ELEMENTARY STATISTICS (#53262)
Course Id: perez64097
Spring 2023

Instructor: Mr. Conrad Perez
Class Time: MW 12:00 PM – 1:50 PM
Classroom: CCI-206
Office: (Math and Sciences Building) MSC1-127
Office Hours: M: 9:00-10:00AM (In-person and Zoom); T: 11:00AM-12:00 PM (In-person and Zoom); TH: 9:00AM-11:00AM (In-person and Zoom); F: 11:00AM-12noon (Zoom only); or by appointment
Phone: 638-3641 ext. 3255
E-Mail: conrad.perez@reedleycollege.edu

Textbook (Optional): Essentials of Statistics (Sixth Edition) by Triola

Web Access (Required): Course Compass access code must be purchased

Computer Requirements:

	Operating systems	browsers
Windows	Windows 10	Microsoft Edge
		Firefox 45 or newer Chrome 49 or newer
	Windows 7	Internet Explorer 11
		Firefox 45 or newer Chrome 49 or newer
Mac OS	OS X 10.12	Safari 11 or 12
		Firefox 45 or newer Chrome 49 or newer
	OS X 10.13	Safari 11 or 12
		Firefox 45 or newer Chrome 49 or newer
	OS X 10.14	Safari 12 Firefox 45 or newer Chrome 49 or newer
OS X 10.15	Chrome 49 or newer	
Chrome OS	Chrome OS	Chrome 49 or newer

- Internet Connection: Cable/DSL, T1 or other high-speed connection. You **cannot** use a dial-up modem for the course.
- Adobe Acrobat Reader

Important Dates: Drop Deadline- Fri. March 10, 2023.

Days Off- Mon. Jan 16; Fri. Feb 17; Mon. Feb 20; Mon.-Fri. Apr 3-7.

Final Exam- Wed. May 17, 2023

Course Prerequisites: C or better grade in Math 103 or equivalent.

Course Overview: The course will cover all or parts of chapters 1-11 as time permits. The course objective is to obtain a solid understanding of the following concepts and problems dealing with statistics:

1. Interpret data displayed in tables and graphically
2. Apply concepts of sample space and probability
3. Calculate measures of central tendency and variation for a given data set
4. Identify the standard methods of obtaining data and identify advantages and disadvantages of each
5. Calculate the mean and variance of a discrete distribution
6. Calculate probabilities using normal and t-distributions
7. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem
8. Construct and interpret confidence intervals
9. Determine and interpret levels of statistical significance including p-values
10. Interpret the output of a technology-based statistical analysis
11. Identify the basic concept of hypothesis testing including Type I and II errors
12. Formulate hypothesis tests involving samples from one and two populations
13. Select the appropriate technique for testing a hypothesis and interpret the result
14. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics
15. Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life science, health science, and education

Course Student Learning Outcomes: Student Learning Outcomes are statements about what the discipline faculty hope you will be able to do at the end of the course. This is NOT a guarantee: the ultimate responsibility for whether you will be able to do these things lies with you, the student. In addition, the assessment of Student Learning Outcomes is done by the department in order to evaluate the program as a whole, and not to evaluate individual faculty performance.

SLO1: Calculate and interpret measures of central tendency and dispersion

SLO2: Calculate basic probabilities

SLO3: Calculate, interpret, and analyze probability distributions and confidence intervals.

SLO4: Calculate, interpret, and analyze hypothesis testing

SLO5: Calculate, interpret, and analyze correlation, regression, and analysis of variance

Attendance: After 4 absences, students may be dropped from the class. Late arrival and leaving class early will be considered as an absence. Any canceled classes will have a note posted on the classroom door.

Behavior: A student may be suspended from the class if he or she engages in a classroom behavior that interferes with the learning environment. Such behavior includes, but is not limited to, disruptive conversations with fellow students, regular tardiness, sleeping, and leaving the classroom during class time. Students are expected to turn off all cell phones and other electronic devices during class time.

Assignments: There will be 7-8 exams worth 200 points apiece. Homework assignments will be worth 5 points apiece and these will be done online at <http://www.pearsonmylabandmastering.com>. A student not registered on the MyMathLab website by the first Friday of the semester will be dropped from the course. A student with 3 consecutive 0s on the homework may be dropped from the course. Quizzes will be given in class and will be worth 1-5 points each. Some homework, quizzes, and/or extra credit may be assigned as group work during the semester. No homework will be accepted after its due date nor any make-up exams given without prior arrangements being made before the homework's due date or before the exam. A student caught cheating will receive an F on the assignment and/or may be dropped from the course.

Grading: The course grade is based upon the points earned from the homework, quizzes, exams, extra credit, and the final. At any time during the course, the grade of a student is determined as follows:

$$\frac{\text{Points Earned}}{\text{Total Points Possible}} \times 100 = \text{grade of the student}$$

The grade will be based upon the following percentages (**NO ROUNDING**):

90-100% A 80-89% B 70-79% C 60-69% D 0-59% F

Note: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.