MATH 11 – ELEMENTARY STATISTICS (#59072)
Course ID: perez06518
Spring 2023

Instructor: Mr. Conrad Perez
Class Time: N/A
Classroom: N/A
Office: (Math and Sciences Building) MSCI-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- Tue. May 16, 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. 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: There will be 2-4 mandatory Zoom meetings throughout the semester during my office hours or by arrangement.

Behavior: N/A

Homework: Homework assignments are completed online and the assignments can be found at the MyLab/Mastering (MyMathLab) website (http://www.pearsonmylabandmastering.com). You may work ahead if you like, all homework for the entire course is now available to the student. **It is important to stay current to be successful in the course! If a student is not registered on MyMathLab by Friday 1/13, then the student will be dropped as a no-show**. The program is set up so that you go in order. You should take exam 1 before you start on the homework for exam 2, and so on. In order to be successful, you should not skip around. Each assignment has a due date and the assignment will be unavailable to the student after the due date for points, but you can still go back and get practice on that homework. **No late homework will be accepted for points.** Each online homework will be worth 10 points.

*Note: When working on the homework, you do not have to complete an entire assignment during one session. If you need to stop while in the middle of an assignment, simply click the **Save** icon and the program will save your work. You can then come back to the assignment and continue from where you left off before the due date.*

Online Tests: There will be eight online tests given. The online tests are also currently available to the student. **If there are 0 s for all homework sections and a 0 for the exam on that homework, then the student will be dropped.** Each online test will be worth 200 points.

Note: All exams must be completed in one seating. Once you begin the online test you will have 90 minutes to complete it. After the 90 minutes have expired the online test will no longer be available to you. It is not possible to stop the exam and return to it later!

Grading: The course grade is based upon the points earned from the homework, online tests, and any extra credit that may be given. 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.