MATH 11, Elementary Statistics, Section #59095 – 100% Online Course

Fall 2023 Course Syllabus

Instructor's Information

- •! Instructor: Ms. Monica Cuevas
- Email: <u>monica.cuevas1@reedleycollege.edu</u>
- Office Hours: By appointment or email

Advisories and Prerequisites

- Basic Skills Advisories: Eligible for English 1A
- Subject Prerequisites: Math 103 or equivalent

Course Description

This course is an introduction to statistical methods and techniques with applications in the fields of business, behavioral and social science, as well as in science, technology, engineering, and mathematics. Topics include descriptive measures of central tendency and variability, probability, binomial and normal distributions, random variables, sampling, estimating, hypothesis testing (parametric and nonparametric), correlation and regression.

Course Materials

- MyLab Access Code (Required): You are required to purchase the MyLab access code by itself without the textbook. The access code gives you access to the e-book: *Essentials of Statistics 7th edition, Mario F. Triola*. All work for this class will be done on MyLab for which you need an access code. <u>This is the 18</u> Week Access Card information that you will need for this class: *MyLab Statistics with Pearson eText -- 18-*Weeks Access Card -- for Essentials of Statistics. Edition: 7th and ISBN: 9780137465712.
- **Technology:** Students are required to have access to a computer with reliable internet. If you do not have internet access at home, then you need to figure out a place you can access the internet to complete the assignments. Not having internet access is not an excuse for missing assignments or tests.
- Scientific Calculator: You are required to have a scientific calculator. There are many handheld models that you can buy.

Attendance & Drop Policy

Attendance is based on the work that you complete. You may be dropped from the course if you fall behind two weeks in terms of due dates.

Communication Policy

The best way to contact me is via email or using the Canvas inbox. I will respond to your email within 24 hours. I will only check my email Monday thru Friday from 8am to 5pm. When sending an email please include "**Math 11**" in the subject line.

Plagiarism and Cheating

Reedley College rules on plagiarism will be enforced. Students who are caught cheating and students that allow others to copy their work will receive a 0% on that assignment (homework, chapter exams, final exams, or any other assignment).

Grading Policy

- 📢 70% Chapter Exams & Final Exam
- 30% Homework and Discussions

Grading Scale

- A: 90% 100%
- B: 80% 89%
- € C: 70% 79%
- ▶ D: 60% 69
- F: Below 60%

Homework and Discussion Boards

<u>All homework assignments will be posted in Canvas</u>. We will be using a platform called MyLab for homework which will be integrated into Canvas. At the bottom of each weekly module, you will see a list of homework assignments that you must complete for that week.

Chapter Exams

<u>All exams will be posted in Canvas</u>. We will be using a platform called MyLab for exams which will be integrated into Canvas. All exams are weighted equally. Students will have one attempt on every exam. Exams will be posted in Canvas and must be completed before the deadline. <u>Students that miss the deadline or do not take the chapter exam will receive 0%</u>. Students who are caught cheating will receive 0% on the exam.

Final Exam

The Final Exam is <u>comprehensive</u> and <u>mandatory</u>. The final exam will be counted as a chapter exam and will be used to replace the lowest chapter exam. A chapter exam cannot replace the final exam. <u>The final exam is due</u> <u>December 8 by 11:59pm and will be posted in Canvas</u>. Students that miss the deadline or do not take the final exam will receive 0%. Students will not be allowed to make-up the final exam. <u>Students who are caught cheating will receive 0% on the final exam</u>.

Late Work Policy

- Homework/Discussion Boards Late homework, and discussion boards will lose a flat 30% and can be turned in until the day of the chapter exam. Homework and discussion boards must be turned in by the due date to avoid any late penalties.
- Chapter Exams Students are not allowed to take chapter exams after the scheduled time. If a student knows in advance that they will not be able to take the exam on the scheduled date, then they must schedule a time to take the exam in advance.
- Final Exam The final exam will not be accepted late. Students who do not take the final exam will receive a zero.

RC Math Center – Tutoring

Tutoring will be available this semester and it's free! The Math Center offers both in-person and online tutoring and it's located in the Math/Science Building. Tutors are available for drop-in and appointment-based sessions. To learn more about their services and to view their schedule, join the <u>Math Center Canvas Course</u>. The dates and times are listed below.

- Monday: 9am 4pm
- 📢 Tuesday: 9am 4pm
- 📢 Wednesday: 9am 4pm
- Thursday: 9am 4pm
- 📢 🕴 Friday: 9am 1pm

Smart-thinking Online Tutoring

Smart-thinking Online Tutoring offers free online tutoring and it's available 24/7. This tool is available to everyone in Canvas, and it's located on the navigation bar.

Important Dates

- August 16 (W) First day of class.
- September 4 (M) Labor Day Holiday (no classes held)
- September 6 (W) Last Day to Add Class
- September 6 (W) Last Day to Drop Class (no W assigned)
- October 12 (TH) Last Day to Drop Class (W assigned)
- November 10 (F) Veteran's Day (no classes held)
- November 23-24 (Th-F) Thanksgiving holiday (no classes held)
- December 4-8 (M-F) Fall 2023 final exam week.
- •! The Final is due Friday, December 8 by 11:59pm and will be posted in Canvas.

Accommodation for Students with Disabilities

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

Course Objectives

By the end of this course students should be able to:

- Distinguish among different scales of measurement and their implications.
- Identify the standard methods of obtaining data and identify advantages and disadvantages of each.
- •! Interpret data displayed in tables and graphically.
- Calculate measures of central tendency and variation for a given data set.
- Apply concepts of sample space and probability.
- Calculate the mean and variance of a discrete distribution.
- Calculate probabilities using normal and t-distributions.
- •! Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem.
- Construct and interpret confidence intervals.
- Determine and interpret levels of statistical significance including p-values.
- Interpret the output of a technology-based statistical analysis.
- Identify the basic concept of hypothesis testing including Type I and II errors.
- Formulate hypothesis tests involving samples from one and two populations.
- Select the appropriate technique for testing a hypothesis and interpreting the result.
- Use linear regression and ANOVA analysis for estimation and inference and interpret the associated statistics.
- •! 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.

Student Learning Outcomes (SLO's)

- Calculate and interpret measures of central tendency and dispersion.
- Calculate basic probabilities.
- Calculate, interpret, and analyze probability distributions and confidence intervals.
- Calculate, interpret, and analyze hypothesis testing.
- Calculate, interpret, and analyze correlation, regression, and analysis of variance.