Math 11 52249 Elementary Statistics

Instructor: Mr. Ron Reimer Meeting Times: Daily 7:00–7:50 am Room: CCI 200	Office: FEM 1F Office Hours: MTW 8–8:50am, T 1-1:50pm, F 9-9:50 am Email: ron.reimer@reedleycollege.edu Phone: 638-0030 ext 3355

Catalog 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.

Objectives: In the process of completing this course, students will:

1. Distinguish among different scales of measurement and their implications;
2. Identify the standard methods of obtaining data and identify advantages and disadvantages of each;
3. Interpret data displayed in tables and graphically;
4. Calculate measures of central tendency and variation for a given data set;
5. Apply concepts of sample space and probability;
6. Calculate the mean and variance of a discrete distribution;
7. Calculate probabilities using normal and t-distributions;
8. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem;
9. Construct and interpret confidence intervals;
10. Determine and interpret levels of statistical significance including p-values;
11. Interpret the output of a technology-based statistical analysis;
12. Identify the basic concept of hypothesis testing including Type I and II errors;
13. Formulate hypothesis tests involving samples from one and two populations;
14. Select the appropriate technique for testing a hypothesis and interpret the result;
15. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics; and
16. 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.

January 21	M	Martin Luther King Jr Day, Campus Closed
February 1	F	Last day to drop a full-term class and avoid a "W" Students who have accumulated more than 2 absences up to and including this date may be dropped Students must have a paid MyLab account prior to this date, students without a paid MyLab account on this date may be dropped
February 15-18	F-M	Presidents Weekend, Campus closed
March 15	F	Last day to drop a full-term class (letter grades required after this date) Students who have accumulated more than 4 absences up to and including this date may be dropped
April 15-19	M-F	Spring Recess, Good Friday, Campus Closed
May 24	F	Final Exam, 7:00–7:50am, CCI 200

Required:
- Online access to MyLab is required, digital text included
- TI-30 X IIS Scientific Calculator
- Graph Paper

Optional Text: Elementary Statistics Picturing the World 7th Edition, Ron Larson
ISBN 13: 978-0-13-468341-6
ISBN 10: 0-13-468341-2

Attendence: In order to maintain continuity of subject matter regular attendance is imperative in any academic course. You are expected to attend all class sessions, arrive on time and stay for the entire session. If you are not present when role is taken you will be marked absent, it is your responsibility to inform me if you arrive after role has been taken.

Homework: Homework assignments will be submitted online through MyLab and in some cases on paper. Assignments will be due no earlier than the next day after the corresponding material is completed in class. Assignments submitted late will receive 70% credit. Work must be written in a neat, organized way on paper.

Exams and Quizzes: Exam dates will be announced at least one week prior to when the exam is given, quiz dates will be announced at least one day before the quiz is given. The final exam will assess the final portion of this class only. Exams may not be re-taken.

Grades: Final grades will be calculated based on weighted categories as follows.

Homework Assignments	25%
Exams and Quizzes	75%

Grading Scale:

$90 < A < 100$
$80 < B < 90$
$70 < C < 80$
$60 < D < 70$
$0 < F < 60$

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.

Academic Dishonesty: Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences ranging from a failing grade on a specific assignment to a failing grade in the course.