Math 11 51575 Elementary Statistics

Instructor: Mr. Ron Reimer Meeting Times: MTWTh 7:00-7:50 AM Room: CCI 200	Office: FEM 1F Office Hours: 9–9:50 AM MWF, 10-10:50 AM TTh Email: ron.reimer@reedleycollege.edu Phone: 638-0300 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 20	M	Martin Luther King Day, No Class
January 31	F	Last day to drop a Spring 2020 full-term class to avoid a "W" Must have a paid MyLab account by this date. Students without a paid MyLab account on this date may be dropped.
February 14-17	F-M	Presidents Weekend, No Class
March 13	F	Last day to drop a full-term class (letter grades required after this date)
April 6-10	M-F	Spring Recess, No Class
May 22	F	Final Exam 7:00-8:50 AM

Required:

- Online access to Pearson MyLab is required, digital text included
- Scientific Calculator (TI-30 X IIS is my favorite)

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, some assignments may be submitted on paper. Assignments submitted late will receive 70% credit. Work must be written in a neat, organized way on paper.

Exams and Quizzes: There will be an several exams throughout this semester, and there may be intermediate quizzes between exams. The final exam will much of this course and will be weighted the same as a chapter exam in your grade. Topics or sections in text covered by exams will be announced. If it helps you, at the end of the semester your lowest chapter exam score will be replaced with your score on the final exam. Exams may not be taken late and 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.