**Course Syllabus**

(Tentative)

 STAT 7-53888 53900

**Elementary Statistics**

**Instructor:**     Mike Sorensen            **Email:**             mike.sorensen@reedleycollege.edu

**Office:**             BUS 40                       **Phone:**            638-3641 Ext. 3615

**Office Hours:** Wednesdays 9:00-1:00

All office hours are by phone or zoom meeting.

I can be reached at (559) 634-0941

I will be happy to arrange a zoom meeting.  Please call to make arrangements.

Additionally, I can meet with you in person if it is very important.  We will have to follow all Reedley College protocol for any face-to-face meetings.  Again, call to make arrangements.

**Text:**

Basic Statistics for Business &   
Economics, 9/e, Lind, et al  
ISBN   
9781260714166

Used books and eBooks are acceptable.  You will not need to purchase a publisher's code.

[Link to Publishers Site for purchase of ebook or rental.](https://www.mheducation.com/highered/product/basic-statistics-business-economics-lind-marchal/M9781260187502.html)

**Student Learning Objectives:**

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

**Outline:**

 Introduction to Statistics

* Describing, Exploring, and Comparing Data
* Probability (Fundamentals and Counting)
* Probability Distributions
* Normal Probability Distribution
* Estimates and Sample Sizes
* Hypothesis Testing – One Sample
* Hypothesis Testing – Two Samples
* Analysis of Variance
* Correlation Analysis/Regression

**Grading**

Your final grade will be dependent on exams.

                                     Exams            100%

Final grades will be based on the following scale:

                        90%-100%                 A

                        80%-89%                    B

                        70%-79%                    C

                        60%-69%                    D

                        Below 60%                 F

**Attendance**

If you do not sign into the class on Canvas during the first week, you will be dropped from the class.

**No Make-up Exams:**

All Exams must be completed on time.  There will be no makeup exams.  Because this class is online, there is a great opportunity for someone to cheat.  Therefore, I will strictly adhere to this policy.

**Accommodations 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 text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 or the Rehabilitation Act, please contact me as soon as possible.

**Last day to drop this course:**

**October 9, 2020**