Reedley College   **Fall 2016**

MATH 11 – Elementary Statistics

<div align="center">SYLLABUS</div>

Schedule No	58558
Class Hours	MTWTh 12:00 p.m. – 12:50 p.m
Room No	FEM 3
Instructor	Sharon Wu
Phone	638-3641 ex-3497
Office Hours	M 11 a.m. – 11:50 a.m.
	F 12 p.m. – 1:50 p.m.
	or By appointment
Office	FEM 1D
E-mail	sharon.wu@reedleycollege.edu

Course 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.

Learning Outcomes:

Upon completion of this course, students will be able to:
1. Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by using tables, graphs, measures of central tendency, and measures of dispersion.
2. Apply concepts and terminology of statistics.
3. Implement the rules of probability.
4. Collect data, interpret and communicate the results using statistical analyses such as confidence intervals, hypothesis tests, and regression analysis.

Course Outline:

1. Introduction to Statistics
2. Summarizing and Graphing Data
3. Statistics for Describing, Exploring, and Comparing Data
4. Probability
5. Discrete Probability Distributions
6. Normal Probability distributions
7. Estimates and Sample Sizes
8. Hypothesis Testing
9. Inferences from Two Samples
10. Correlation and Regression

11.   Chi-Square and Analysis of Variance

Course Prerequisite:
Mathematics 103 – Intermediate Algebra

Advisories:
English 125 and 126

Textbook:
Essentials of Statistics, 5th Edition; by Mario F. Triola; Pearson.

Learning Management System (LMS) - Canvas:
Canvas is used to post announcements, course information, programming assignments, and grade. You will submit your programming assignments on Canvas.
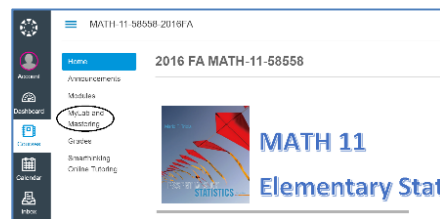To log-in Reedley College Canvas:
> **User name**:
> **Password**:   (* Be sure to change your password after your first login)

MyMathLab
MyMathLab is an online learning and homework assessment system. You will access MyMathLab via CANVAS. See the screen shot display on the right.

Homework Assignment:
Homework assignments are assigned online using MyMathLab. First, you need to register MyMathLab (sign up) for this class.

You will be **dropped** from this class, if you have not registered on MyMathLab **by Thusday, 8/18.**

Tests:
There will be a test for each chapter. And there is a final exam at end of the semester. Each test worth 100 points. Early tests can be arranged with a very good reason. A more **difficult** late test can only be arranged if you have an excuse verified by an impartial party (i.e., a doctor or a court note).

Grading:
30% of the final grade points are from homework assignment
70% of the final grade points are from chapter tests

Final grade is assigned using following scale:
> 90-100 % A
> 80- 89% B
> 70- 79% C
> 60- 69% D
> < 60 % F

❖   If you have perfect attendance and your grade is within 1 point (or 1%) of the next higher letter grade, the instructor will award you the next higher letter grade.

Important Dates:

Class begin		Monday	08/15/2016
Last day to register		Friday	09/02/2016
Last day to drop this class to avoid a "W"		Friday	09/02/2016
Last day to change to/from a Pass/No-Pass grading basis		Friday	09/09/2016
Last date to drop this class		Friday	10/14/2016
No classes:			
	Labor Day	Monday	09/05/2016

MATH 11 – Elementary Statistics

Veterans Day	Friday	11/11/2016
Thanksgiving	Th & F	11/24 – 11/25/2016
Final Exam	**Monday**	**12/12/2016** **12:00 pm – 1:50 pm**

Attendance:
   Attendance will be taken at beginning of each class. Students are expected to attend all class meetings, be on time, and be in class the entire class session. Students, who leave the class before the end of class, will be counted as tardy. Two tardiness count as one absence. Your classmates and I would greatly appreciate that you take care of your personal needs (i.e., using the restroom, getting a drink…etc.) before the class begins.
   Students will be dropped from the class if they fail to attend the first class session of the semester. During the semester up to final drop date, any student who missed more than two weeks of class meetings will be dropped from this class (**8** classes).

Student Conduct:
   Students are expected to conduct themselves in a responsible manner in the classroom. Specific rules and regulations have been established in Board Policy 5410. Failure to adhere to the accepted standards will result in disciplinary action. Campus Policies on Student Conduct is described in <u>Reedley College Class Schedule</u>.

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 of the Rehabilitation Act, please contact me as soon as possible.

Plagiarism and Cheating Policy:
   Cheating and plagiarism is prohibited in the class. Incidents of cheating and plagiarism will result a failing grade on the particular examination or assignment in question.