

Reedley College  
Fall 2010

**Course:** Math 11 – Elementary Statistics - 4 units  
**Schedule #:** 56365  
**Location:** CCI 200  
**Time:** 2:00 to 2:50 AM  
**Days:** M T W Th

**Instruction:** January 11 to May 14

**Final Exam :** Monday, December 13 2:00 to 3:50

**End of semester:** Friday, December 17

**Instructor:** Marv Watts  
**Office:** Building FEM room 4A  
**Office Hours:** **Monday, Tuesday, and Thursday** 1:00 - 1:50

**Phone:** 559 638-3641 ext. 3279  
**e-mail:** rexlex@verizon.net

**Text Book:** Essentials of Statistics, A step by step approach, A Brief Version 5/e  
By Allan G. Bluman, McGraw Hill

**Course Description:** Math 11 is an introduction to statistical methods and techniques for business, behavioral, and social science majors. Topics include descriptive measures of central tendency and variability, probability, binomial and normal distributions, random variables, sampling, estimation, hypothesis testing (parametric and nonparametric), correlation and regression.

**Prerequisite:** Prerequisites will be rigorously enforced - Math 103 (Intermediate Algebra) with a grade of "C" or better.

**Drop Policy:** Students with 7 or more absences may be dropped from class! Every 2 tardies will count as 1 absence. It is the student's responsibility to recognize when dropping a course becomes necessary.

**Drop Deadline: Friday, October 15:** The drop deadline will be at the end of the ninth week. After that date, the student must be given a letter grade.

**Attendance:** You are expected to attend **all** class meeting and **be on time**. If you arrive late, it is your responsibility to inform the instructor after class so your absence will be changed to a tardy. Regular attendance and completion of assignments are imperative for success. Please be on time to class. It is distracting, rude and unfair to fellow classmates when a student is late.

**Calculators:** Calculators are essential. If calculators are allowed on tests, there will be no sharing of calculators. Recommended calculators: TI 83, TI 83 plus, TI 84 plus, and TI 84 plus silver edition. There are other calculators you can use but these are the recommended

**Cell Phones:** Turn off cell phones before entering class! Do not use your cell phone as a calculator.

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

**Academic Dishonesty:** Academic dishonesty in any form is a very serious offense and will incur serious consequences.

**Homework:** Homework **must** be written clearly and neatly on one side of standard size paper 8 1/2" x 11" (*no spiral or frayed paper please*). Pages should be **stapled** in the upper left-hand corner, and in order. Homework should be written with pencil - **don't use ink!** Write down the homework problem and **show all** steps and calculations. **No work - No credit**, unless answer is obvious. Record the class name (Math103), your name, homework (**Chapter and section**), and date on the back of each homework assignment (see example below). Each homework assignment will be worth 0 to 10 points. When collected problem assignments will be spot checked. Not all assignments will be collected. Homework will be assigned at the end of each class and usually due at the beginning of the next class meeting. Late homework (no more than one day) will receive 5 points at most. Homework grades will be averaged at the end of the semester and a final homework grade from 0 to 100 will be assigned. Remember - your homework will also be graded on **completeness** and **neatness**. If you are absent an assignment may be mailed for full credit if postmarked the same day class meets or before.

Mail to:

Reedley College  
Attn. Marv Watts  
995 N. Reed  
Reedley, Ca 93654

Example homework:

Math 11  
your name  
Chapter 3 Sec 4  
date

**Examination Procedures:** At least 6 or 7 exams (quizzes), a final, homework, and class participation will determine your grade. There will be **no make-up exams during the period of instruction!!** If a student misses an exam the final may be taken to replace the missed exam. The final will be **comprehensive**. The final may also be used to replace any exam (quiz) score. No exam (quizzes) scores will be dropped. Class participation will consist of student board work, short quizzes, and oral participation. The exams will consist of problems similar to homework problems. Each exam is worth 100 points, homework & class participation is worth 100 points and the final is 100 to 200 points. Partial credit will be given on exams and final. Exams and final will generally be closed book.

**Grading:** The following is the grading scale:

100 to 87 A  
86 to 77 B  
76 to 67 C  
66 to 58 D  
below 58 F

Tentative credit for course work:

Exams	600 points
Final	100 points
Class Participation & Homework	<u>100 points</u>
Approximate total possible points	800

Students whose grade averages are 86, 76, and 66 may be assigned the next higher grade if they have good attendance and have taken an active roll in class (class participation)

**We will not meet for class on the following dates:**

Monday, September 6  
Thursday November 11  
Thursday & Friday, November 25 - 26

Labor Day Holiday  
Veterans Day Holiday  
Thanksgiving Holiday



## II. COURSE OUTCOMES:

*(Specify the learning skills the student demonstrates through completing the course and link critical thinking skills to specific course content and objectives.)*

Upon completion of this course, students will be able to:

- A. Summarize given data sets using a variety of graphs.
- B. Apply measures of central tendency (mean, median, and mode) and variability (standard deviation, quartiles, and range) in application problems.
- C. Apply basic rules of probabilities. Identify if an event is independent or dependent and calculate the probability of the event.
- D. Identify whether a discrete or continuous probability distribution is necessary and apply the appropriate formula to calculate probabilities in application problems.
- E. Apply sampling theory to collect a sample from a population by the method of simple random sampling.
- F. Estimate the parameters of a population by using large and small sample procedures for constructing confidence intervals. Determine the minimum sample size to obtain a desired margin of error.
- G. Apply the  $z$ ,  $t$ , Chi-squared, and Analysis of Variance test of significance.
- H. Apply correlation and simple linear regression to determine existence of relationships amongst quantitative variables.

## III. COURSE OBJECTIVES:

*(Specify major objectives in terms of the observable knowledge and/or skills to be attained.)*

In the process of completing this course, students will:

- A. Summarize and describe given data sets
- B. Apply the methods of descriptive statistics to determine the measures of central tendency and variability to a variety of problems.
- C. Apply basic principles of probability to determine probabilities of a variety of events.
- D. Analyze discrete and continuous probability distributions.
- E. Explore the basics of sampling theory.
- F. Estimate population parameters through studying confidence intervals.
- G. Examine hypothesis testing for small and large samples and multiple populations.
- H. Determine if a relationship exists between quantitative variables.