Reedley College – SUMMER 2009 - Course Syllabus

Math 11 WEB, Elementary Statistics Online, Section # 78059

Instructor: Mrs. Lina Obeid   **Class Room:** Web   **Class Time:** *WEB*
Office and Office Hours: online via e-mail   **E-Mail:** lina.obeid@reedleycollege.edu

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Basic Skills Advisories: Eligibility for English 125 and English 126
Subject Prerequisites: Successful completion of Math 103

Optional* Texts: Triola, Mario (2008). *Essentials of Statistics*. 3rd Edition. Boston: Pearson. (With DVD/coursecompass supplement) * **The textbook is optional, but the <u>access to coursecompass is mandatory</u>. The access can be bought online if you do not want the textbook. You have access to the book online with the access code. The access code costs $64, and can be purchased online at <u>www.coursecompass.com</u>. The use of a credit card is required if you purchase it online. The book and online access is available at the bookstore for about $140.00.**
Fun reading: Huff, Darrell. (1993). *How To Lie With Statistics*. New York: Norton & Co.

<u>Requirements</u>: *A **dial-up connection is too slow.***   The website that the class will be using is <u>www.coursecompass.com</u> [and NOT Blackboard – only the orientation video will be uploaded on Blackboard]. This site only requires that your browser (i.e. internet explorer, netscape, etc.) has specific plug-ins.

Materials Needed:
Graph paper, binder, binder paper, ruler, pencils, erasers, stapler
TI 83Plus or TI83Plus Silver Edition calculator; Check with the instructor for the use of other calculators.

Course Description:
As stated in the Reedley College course outline, Math 11 is an introduction to statistical methods for business, behavioral, and social science majors. Topics include descriptive measures of central tendency and variability, probability, binomial and normal distributions, random variables, sampling, estimating, hypothesis testing, correlation and regression.

Attendance and Tardy Policy:
- Students who do not send a confirmation e-mail regarding viewing the orientation by June 17 will be dropped as a NOSHOW. Students who do not sign up to coursecompass.com by June 19 will be dropped as a NO SHOW. Students who do not work on their first assignments might also be dropped.

- **Since this is an online class, students are expected to check their e-mails regularly and work on www.coursecompass.com daily and regularly.** That is what attendance is based on. **Late work is not accepted.** Excuses will not be accepted (for example, I did not read my e-mail, my computer froze, ...).

- Students are expected to attend the onsite <u>mandatory</u> meetings, arrive on time, bring a valid picture ID, and stay for the whole class period. Students who are absent or late, or who leave early will receive a <u>zero</u> on the missed or late assignment. Excuses are not accepted.

Behavioral, Campus, and Academic Policy:
- Reedley College campus policies and academic regulations will be implemented in this class.

<u>Plagiarism</u>: Reedley College rules on plagiarism will be enforced. Students cheating and students allowing others to cheat off of their assignment will receive a 0% on that assignment (whether it is a final, test, quiz, midterm, or any other assigned work). <u>PLEASE NOTE</u>: Scoring by 20% or higher on the online chapter quizzes, then on the onsite midterm exams might be a sign of cheating. **The teacher reserves the right to make that conclusion.** [For example, if a student scores a 75% on the online chapter quiz, but scores a 55% on his midterm which is based on the same material – this might mean that the student got unauthorized help on the online chapter quizzes.]. In that case, the rules on plagiarism/and cheating will be enforced.

Grading Policy: Students are graded according to the following:

       Online homework grades constitute **10%** of the student's overall grade.

       Online chapter quizzes grades constitute **30%** of the student's overall grade.

       Onsite Midterm exams grades constitute **40%** of the student's overall grade.

       Onsite Final Exam grades constitute **20%** of the student's overall grade.

- **Online Homework:** Homework is assigned on regular basis. <u>Homework will not be accepted late.</u> Homework assignments will be given on-line. You may work a couple of days ahead if you like. ***It is important to stay current to be successful in the course!*** **Do not expect to take the exam and then complete the homework.** Each assignment has a due date and the assignment will be unavailable to the student after the due date. You might need to score a 70% or above to move on to the next assignment. The two lowest homework scores will be dropped.

- **Online chapter quizzes:** Online chapter quizzes are to be taken by the scheduled date/time. They are timed, so pace yourself. You WILL NOT BE ALLOWED TO SCORE ON AN ONLINE QUIZ HIGHER THAN THE AVERAGE HOMEWORK SCORE FOR THAT CHAPTER. *[Example: you score an average of 30% on the homework on chapter 4, but you score 70% on chapter 4 online quiz – your score of 70% will not count – chapter 4 online quiz score will be changed to 30%.] The reason for that is you cannot learn the material in an online class without doing the homework. Another reason is that you have to earn the right to a good grade through a show of effort – this also prevents cheating (getting someone to take the quizzes).* To avoid putting yourself in such a situation, be sure to complete the homework first! **<u>Online quizzes will not be accepted late.</u> The lowest online quiz score will be dropped to allow for emergencies.**

- **Onsite Midterm Exams**: 2 onsite midterm exams will be administered throughout the semester. Students <u>No make-up exam will be given for any reason</u>. Student need to present their valid picture ID or Driver's license to be allowed to take the midterm. NO ID= NO MIDTERM. Students who do not take a midterm will receive a score of ZERO on that midterm. NONE OF THE MIDTERMS ARE DROPPED. The final exam score, however, may be used to replace a chapter exam score.

- **Onsite Final Exam:** is a comprehensive final meaning it might contain any of the material covered from the entire semester. NO ID= NO FINAL.   ***The final exam score may be used to replace the lowest midterm score. The final exam score cannot be replaced by a midterm score. Students who do not take the final will receive a score of 0%.***

If students need further clarification regarding grades, they are welcome to consult the instructor.

Grading Scale:

Grade		Percent	Grade		Percent
A	=	90% - 100%	D	=	60% - 69%
B	=	80% - 89%	F	=	Below 60%
C	=	70% - 79%			

Tips for Success:
- Work daily and regularly;
- **Do <u>not</u> procrastinate;**
- Turn in well thought-out assignments on time with all the work shown step-by-step;
- Put in the <u>maximum effort</u> daily in every aspect of your work;
- Do not wait until you are failing or you are completely lost to ask questions.
- READ THE SECTIONS, do examples, and view the videos.

    ➤ **Accommodations for students with disabilities:**

If you have a <u>verified need</u> for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic test, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me <u>as soon as possible</u>.

<p style="text-align: center">IMPORTANT DATES AND DEADLINES</p>

WARNING: **This is an extremely fast paced class. Only students who have strong math skills and strong study skills will succeed. Also, please make sure to check your calendar. Those dates are non-negotiable. Please drop the class if the dates or pace of the class is not appropriate for you.**

<p style="text-align: center">****Print and Post this page next to your computer screen****</p>

<p style="text-align: center"># MARK YOUR CALENDARS NOW!</p>

I. Important General Class Dates: Summer 2009

June 15	**Monday**	**First Day of Summer 2009 Classes**
June 16	**Tuesday**	**View Orientation Video**
June 17	**Wednesday**	**Send confirmation e-mail as detailed in intro memo**
June 18	**Thursday**	**Instructor drops students who did not send confirmation e-mail: NO SHOW**
June 19	**Friday**	**Last day to register and to access at www.coursecompass.com**
June 20	**Saturday**	**Instructor drops students who did not register in coursecompass.com: NO SHOW**
June 25	Thursday	Last day to drop a Summer 2009 class without a W
July 2	**Thursday**	**Onsite Midterm 1**
July 11	Saturday	Last day to drop a Summer 2009 class (letter grades assigned after this date)
July 30	**Thursday**	**Onsite Midterm 2**
August 6	**Thursday**	**Onsite Final Exam**

II. <u>ONSITE</u> MEETINGS/EXAMS IMPORTANT DATES:

- ➢ **There will be <u>3 onsite mandatory meetings</u> at Reedley College during the semester.**
- ➢ All these meetings must be attended on time with a Valid Driver's License.
- ➢ **Failure to attend those dates will result in receiving a 0% on the midterm exam or finals with no chance of make up.   No exceptions!**

1. Onsite Exam 1: July 2@Reedley College - Room # TBA from 4 to 5:30pm <u>OR</u> 6-7:30 pm

2. Onsite Exam 2: July 30@Reedley College - Room # TBA from 4 to 5:30pm <u>OR</u> 6-7:30 pm

3. Onsite Final: **August 6** @ Reedley College - Room # TBA from 4 to 5:30pm <u>OR</u> 6-7:30 pm

Room numbers are to be announced.

▶ *Instructor reserves the right to make changes to the syllabus.*

➢ **COURSE OBJECTIVES:**
In the process of completing the course, the student 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.

➢ **COURSE CONTENT OUTLINE**:
A. Introduction to Statistics
  1. Statistical data
  2. Frequency distributions
  3. Graphs

B. Population Parameters and Sample Statistics
  1. Measures of central tendency.
      a. Mean
      b. Median
      c. Mode
  2. Measures of Variability
      a. Standard deviation
      b. Quartiles
      c. Range

C. Probability
  1. Rules of probability, random variables, and expected value.
  2. Discrete and continuous probability distributions.
      a. Binomial Distribution
      b. Hypergeometric Distribution
      c. Poisson Distribution
D. Sampling Theory
  1. Simple random sample
  2. Central Limit Theorem

E. Estimating Population Parameters
  1. Estimating from a small or large sample.
  2. Sample size.

F. Hypothesis Testing (Parametric/Nonparametric)
  1. One population, one and two sided tests.
      z-test for means and proportions.
      t-test for means (independent and dependent samples)
  2. Two populations, sampling distributions
  3. Chi-squared (Goodness of Fit and Contingency Tables)
  4. Analysis of Variance (ANOVA) *(as time permits)*

G. Correlation and Simple Linear Regression *(as time permits)*
  1. Correlation coefficient
  2. Regression coefficient
  3. Test of hypothesis about the value of correlation/regression coefficient.