Math 11H: Elementary Statistics, Spring 2012

Instructor: Walid Tayar Email: <u>walid.tayar@reedleycollege.edu</u> Office Hours: M-TH 8:15-9:00am, in FEM 1K or by appointment Phone: 559-638-3641 ext. 3263 Schedule #: 56036 MTTHF from 9:00am-9:50am Room: FEM 4E

Prerequisites:

Math 103. Basic skills advisories: Eligibility for ENGL 125 and ENGL 126

Catalog Description:

This course is designed for honors students who wish to gain a thorough understanding in both the theory and application of statistics. The honors course will utilize technology throughout the course to enhance understanding of concepts and their applications. Students will demonstrate theoretical and practical mastery of topics through student projects. 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.

Required text:

You can buy the bundled textbook (which includes the textbook and access code for MyStatLab) at the Reedley College Bookstore. Be careful, once you open the kit you will <u>not</u> be able to return the book for a full refund. You can also purchase the access code by itself, without the book. The book is available <u>electronically</u> through the website. Most of the homework for this class will be done on a website called Course Compass for which you will need the access code. Ask for the Math 11 Honors book for Mr. Tayar's class, schedule #56036. Another option would be to purchase the access code through CourseCompass. I will explain in this on the first day of class.

Text: Mario Triola, <u>Essentials of Statistics</u>, 4th Edition **Reading:** TBA

YOU MUST BE REGISTERED ON COURSE COMPASS BY THE END OF THE DAY ON WEDNESDAY JANUARY 11 OR YOU WILL BE DROPPED!

Course Materials:

- 4 x 6 note cards
- Calculator (we will be using the TI-84 in class)
- Notebook paper
- Graphing paper
- Ruler/pencils
- Stapler (try the dollar store)
- 3-ring binder (for class notes)

Blackboard:

This course will utilize blackboard for announcements, handouts, assignments, etc. You can access blackboard from the Reedley College homepage or at http://blackboard.reedleycollege.edu. Your login and password to blackboard is as follows: Login ID: "your student ID#"

Password: "your student ID#"

Online Homework:

Online homework assignments are completed online and the assignments can be found at the Course Compass website. You may work ahead if you like. Each assignment has a due date and the assignment will be unavailable to the student after the due date. Homework will not be accepted late, but the two lowest homework scores will be dropped to allow for any emergencies or missed assignments. It is important to stay current to be successful in the course!

<u>Note:</u> When working on homework, you do not have to complete an entire assignment during one session. If you need to stop while in the middle of an assignment, you can submit your work and the program will save it for you. You can then come back to the assignment and continue from where you left off at another time.

Written Homework:

There may be written homework assignments for the semester. All <u>work must be shown</u> in order to receive full credit for these assignments. I will answer any HW questions at the beginning of each class. Your homework will be graded on completeness, neatness, and effort. Problems must be written out in pencil and all work must be shown in order to receive credit. I will not accept HW on spiral bound notebook paper. Please staple your HW in the top left corner and clearly highlight the section number at the top of each page or it will not be accepted. If you come to class after the HW has been collected or are absent it will not be accepted for full credit. It is your responsibility to keep up with the pace of the class.

In-Class Assignments:

There will be quizzes, in-class assignments and possibly group projects assigned throughout the semester. No in class assignments can be made up so attendance is very important. These assignments will be included as part of your HW grade.

Attendance:

If you are absent more than once in the first two weeks of the semester, more than twice in the first four weeks or more than 3 times in the first nine weeks, you may be dropped from the course. Attendance is a key factor in your success as a college student. Students are expected to attend all class meetings, be on time, and be in class the entire class session. Four absences over the course of the entire semester may result in a drop from the course. However, if you decide to drop the course, it is your responsibility to make the drop official in the Admissions and Records office or else possibly receive an F in the course. Also, there are to be no visitors in class for any reason. Pagers, cell-phones, CD/DVD/MP3 players, and any other electronic device must be turned off, silenced, and out of sight before entering

class. You will be asked to leave if your phone rings in class. Also, cell phones are NOT to be used as calculators.

Tardies:

It is distracting, rude and unfair to classmates and to the instructor when a student is late. Leaving class at anytime during the lecture will not be allowed. Please use the restroom/make phone calls before or after class. If you leave class at any time, it will count as a tardy. Two tardies will be counted as an absence. You are responsible for telling me, at the end of class, that you were tardy. If I mark you absent and you do not tell me of your tardy, you will remain absent. If you leave class early, you will be marked absent. Students with chronic tardiness may be dropped from the course.

Exams:

There will be an exam at the end of each unit, approximately every 3 weeks. Each exam will be worth 100 points. There are no make-ups for missed exams. No exceptions. Calling the day of the exam and telling me that you cannot make it to class is inexcusable.

<u>Final Exam:</u>

A final exam worth 100 points will be given at the end of the semester during finals week.

• <u>Final</u>: Wednesday, May 16th from 9:00am-10:50am

Grading:

- Homework (Online/Written) will be worth 20% of your overall grade.
- Exams and Final will be worth 80% (Lowest Exam score will be replaced by Final score)

Percent	Grade
90 - 100	А
80 - 89	В
70 – 79	С
60 - 69	D
0 – 59	F

Course Outline:

The Nature of Probability and Statistics, Frequency Distributions and Graphs, Data Description (2.5 weeks)

Probability and Counting Rules (2.5 weeks)

Discrete Probability Distributions (2.5 weeks)

The Normal Distribution (2.5 weeks)

Confidence Intervals and Sample Size (2.5 weeks)

Hypothesis Testing (2.5 weeks)

Testing the Difference Between Two Means, Two Variances, and Two Proportions, Correlation and Regression, Chi-Square and Analysis of Variance (2.5 weeks)

Important Dates:

January 16 (M) Martin Luther King, Jr. Day observed (no classes held, campus closed) January 27 (F) Last day to drop a full-term class to avoid a "W" for Spring 2012 February 17 (F) Lincoln Day observed (no classes held, campus closed) February 20 (M) Washington Day observed (no classes held, campus closed) March 9 (F) Last day to drop a full-term class (letter grades assigned after this date) April 2-6 (M-Th) Spring Recess (no classes, campus open, classes reconvene April 9) April 7 (F) Good Friday (no classes, campus closed) May 18 (F) End of spring semester/commencement

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 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.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to

gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Note: This syllabus is subject to change at the discretion of the instructor.