# Math 11 WEB:  Elementary Statistics, Spring 2014

**Instructor:** Walid Tayar
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**Office Hours:** M-TH 8:15-9:00am in FEM 1K or by appointment
**Phone:** 559-638-3641 ext. 3263 (USE EMAIL)
**Schedule #:** 52905
COURSE ID:  tayar90594

## MANDATORY MEETING DATES:
Orientation: 1/15/2014 WED from 6-8pm in Room FEM 12
Midterm #1:  2/26/2014 WED from 6-8pm in Room FEM 12
Midterm#2:  4/23/2014 WED from 6-8pm in Room FEM 12
Final: 5/20/2014 TUES from 6-8pm in Room POR 5

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

## Catalog Description:
This 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, estimating, hypothesis testing (parametric and nonparametric), correlation and regression.

## Optional Text:
Mario Triola, ESSENTIALS OF STATISTICS/MYSTATSLAB PKG, 4th
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.  All of the work for this class will be done on a website called MyStatLab for which you will need the access code. **Another option would be to purchase the access code through MyStatLab.**

**WHEN SETTING UP YOUR ACCOUNT ON MYSTATLAB, USE YOUR <u>7-DIGIT REEDLEY COLLEGE ID AS YOUR USERNAME</u> (0123456)**

**YOU MUST BE <u>REGISTERED ON MYSTATLAB</u> BY THE END OF THE DAY ON  THURSDAY, JAN 16th OR YOU WILL BE DROPPED! NO EXCEPTIONS!!**

**IF YOU ARE USING THE <u>TEMPORARY ACCESS</u> CODE, YOU MUST PAY FOR ACCESS NO LATER THAN THE END OF THE DAY ON <u>WEDNESDAY, JAN. 29th</u> OR YOU WILL BE DROPPED! NO EXCEPTIONS!!**

**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#"

**Course Materials:**
- Calculator (TI 83, 84 or 84 plus)
- Two spiral grid paper notebooks Cambridge brand from bookstore. No other accepted!
- Ruler/pencils
- 3-ring binder (for class notes)

**Online Homework:**
Online homework assignments are completed online and the assignments can be found at the MyStatLab website. You may work ahead if you like. Each assignment has a 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. You can access any past due assignments for review and to complete in your notebook, but not to improve your grade online. If you do not complete two weekly homework assignments in a row you may dropped. It is important to stay current to be successful in the course!

Note: 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 as long as you do so before the deadline.

**Notebook:**
You will be required to keep all of your written work from your online homework assignments in a notebook. 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. Your final answer for each problem needs to be circled or boxed in. Make sure to write out each problem and solution. Word problems do not need to be written out. The required notebook can be purchased at the book store. This will be a part of your notebook grade and will be due at the beginning of class on exam days. You can earn up to half credit for a past due notebook if turned in by the beginning of the next class meeting. Your lowest notebook grade will be dropped (see attached example of notebook entries).

YOU MUST HAVE TWO NOTEBOOKS!!

**Attendance:**
Students are expected to attend all scheduled class meetings, and be on time. The doors will be locked at 6pm so be there early. I will not allow you to take the midterm if you are late and you will get a 0. Eight days of inactivity on MyStatLab may result in a drop from the course. 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. Leaving class at anytime will not be allowed. Please use the restroom/make phone calls before class or at the designated break times.

**Midterms:**
There will be a midterm at the end of each unit, approximately every 5 weeks. There are no make-ups for missed midterms. No exceptions. Calling the day of the midterm and telling me that you cannot make it to class is inexcusable.

**Final Exam:**
A final exam will be given at the end of the semester during finals week.
Final: Tuesday May 20th at 6pm-8pm in room POR 5

ALL CELLPHONES/ELECTRONICS ARE TO BE COMPLETELY OUT OF SIGHT AND TURNED OFF DURING THE EXAMS OR YOU WILL RECEIVE A 0% ON THAT EXAM AND IT WILL NOT BE DROPPED OR REPLACED BY THE FINAL EXAM SCORE. THIS WILL BE COUNTED AS CHEATING (SEE CHEATING POLICY BELOW). NO EXCEPTIONS!!!

**Grading:**
- The online homework will be worth 15% of your overall grade
- The notebook will be worth 5% of your overall grade
- The Midterms and Final will be worth 80% (the lowest of these scores will be replaced by the final score)

| Percent | Grade |
|---------|-------|
| 90 - 100 | A |
| 80 – 89 | B |
| 70 – 79 | C |
| 60 – 69 | D |
| 0 – 59 | F |

## Course Outline:
The Nature of Probability and Statistics, Frequency Distributions, Graphs, Data Description
Probability and Counting Rules
Discrete Probability Distributions
The Normal Distribution
Confidence Intervals and Sample Size
Hypothesis Testing
Testing the Difference Between Two Means, Two Variances, and Two Proportions, Correlation and Regression, Chi-Square and Analysis of Variance

## Important Dates:
January 31 (F) Last day to add a full-term class for Spring 2014
January 31 (F) Last day to drop a full-term class to avoid a "W" (in person) for Spring 2014
January 31 (F) Last day to drop a full-term class to avoid a "W" (on WebAdvisor)
February 13 (Th) Last day to change a class to/from a Pass/No-Pass grading basis
March 14 (F) Last day to drop a full-term class (in person) (letter grades assigned after this)
March 20-31 (Th-M) Summer/Fall 2014 registration begins for continuing students
May 19-23 (M-F) Spring 2014 final exams week
May 23 (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.

<u>**Academic Dishonesty**</u>
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.**

# Section 6.1

① Find the greatest common factor

$$77 = 7 \cdot 11 \qquad GCF = \boxed{7}$$
$$343 = 7 \cdot 7 \cdot 7$$

②

$$66 = 2 \cdot 3 \cdot 11$$
$$78 = 2 \cdot 3 \cdot 13$$
$$GCF = 2 \cdot 3 = \boxed{6}$$

③
$$12 = 2 \cdot 2 \cdot 3$$
$$28 = 2 \cdot 2 \cdot 7$$
$$24 = 2 \cdot 2 \cdot 2 \cdot 3$$
$$GCF = 2 \cdot 2 = \boxed{4}$$

④ $a^6$
$\quad a^8$
$$GCF = \boxed{a^6}$$

⑤ $a^7 b^2 \qquad GCF = \boxed{a^7 b^2}$
$\quad a^7 b^6$

⑥ $55 = 5 \cdot 11 \qquad x^8 \qquad GCF = \boxed{5x^8}$
$\quad 35 = 5 \cdot 7 \qquad x^7$

⑦ $3y - 6 = \boxed{3(y-3)}$

⑧ $14a^2 + 3a = \boxed{a(14a+3)}$

⑨ $315x^2 + 105x + 21$
$\quad 315 = 3 \cdot 3 \cdot 5 \cdot 7$
$\quad 105 = 3 \cdot 5 \cdot 7 \qquad GCF = 21$
$\quad 21 = 3 \cdot 7$

$$\frac{315x^2}{21} + \frac{105x}{21} + \frac{21}{21}$$
$$\boxed{21(15x^2 + 5x + 1)}$$