Math 11: Elementary Statistics, SPRING 2015

Instructor: Walid Tayar
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Phone: 559-638-3641 ext. 3263 (use email)
Office hours: MTWTH 8:30am-9am in FEM 1K or by appointment
Virtual Office Hour: Friday 8:30am-9:30am via email
My Math Center hours: MW 12:00pm-12:50pm in FEM 1
10:00-10:50am Class Schedule #: 55307 M-TH in room CCI 201
11:00-11:50am Class Schedule #: 55309 M-TH in room CCI 206

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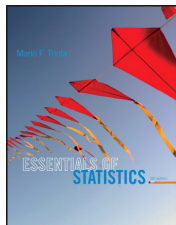Math 103. Basic skills advisories: Eligibility for ENGL 125 and ENGL 126

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.

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. **Another option would be to purchase the access code through MyStatLab. I will explain this on the first day of class.**

Text: Mario Triola, <u>Essentials of Statistics</u>, 5th Edition

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

YOU MUST BE REGISTERED ON MYSTATLAB BY THE END OF THE DAY ON <u>MONDAY JANUARY 12</u> OR YOU WILL BE DROPPED!
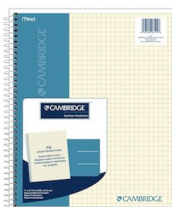
IF YOU ARE USING THE <u>TEMPORARY ACCESS</u> CODE, IT IS YOUR RESPONSIBILITY TO PAY FOR ACCESS BY THE EXPIRATON DATE OR YOU WILL BE DROPPED! NO EXCEPTIONS!

Required Course Materials:
- Stats Calculator (TI-84)

- Pencils/rulers/paper etc.
- Class notes to be printed from Blackboard
- 3-ring binder (for class notes)
- Mead Cambridge Quad Wire-bound Notebook (graph paper) from the bookstore for homework. **No other notebook will be accepted!** (See image below)

Blackboard:
This course will utilize blackboard for lecture notes, 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 MyStatLab website. You may work ahead if you like. Each assignment has a due date and no extensions will be provided under any circumstances. Your two lowest homework scores will be dropped to allow for any emergencies or missed assignments. You can access and complete any past due assignments and earn 50% credit on the past due problems up until the unit exam. 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 notebook will be graded on completeness, neatness, and effort. Please make sure to write the section number at the top of each page and circle problem numbers down the left side of the page. You may create more columns on each page to fit more work but this needs to be very

neat. Do not start a new section in the middle of a page. Please start a new section on a new page. Please separate each chapter with a labeled tab as well. Problems must be written out in pencil and all work and graphs 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. <u>Word problems and large data sets greater than 10 do not need to be written out.</u> 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 (see attached example of notebook entries). Your lowest notebook score will be dropped at the end of the semester.

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. Your homework will be graded on completeness, neatness, and effort. If you come to class after the HW has been collected or are absent it will not be accepted for full credit. You can turn it in by the next class period for half credit.

In-Class Assignments:

There may be 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. There are to be no visitors in class for any reason. ALL ELECTROINC DEVICES MUST BE TURNED OFF AND OUT OF SITE BEFORE ENTERING CLASS. If you need to text or use your phone <u>before class begins,</u> please step outside. 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 3-4 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.

YOU MAY NOT LEAVE CLASS DURING AN EXAM. YOU MUST SUBMIT YOUR EXAM BEFORE YOU LEAVE. 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!!

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

Extra Credit:
Extra credit maybe assigned and will be applied to each unit. For example, extra credit points earned during Unit I will be applied to your Unit I grade.

Grading:
- Homework (Online/Written) will be worth 20% of your overall grade.
- Notebook will be worth 5% of your overall grade
- Exams and Final will be worth 75% (lowest exam score will be replaced by 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 and 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 12	(M)	Spring 2015 instruction begins
January 19	(M)	Martin Luther King, Jr. Day observed (no classes held, campus closed)
January 23	(F)	Last day to request an Enrollment Fee Refund
January 30	(F)	Last day to add a full-term class
January 30	(F)	Last day to drop a full-term class to avoid a "W" (in person)
February 1	(SU)	Last day to drop a full-term class to avoid a "W"
February 6	(F)	Last day to change a class to/from a Pass/No-Pass grading basis
February 13	(F)	Lincoln Day observed (no classes held, campus closed)
February 16	(M)	Washington Day observed (no classes held, campus closed)

March 13	(F)	Last day to drop a full-term class (in person)
March 27	(Th)	Deadline to file Intent to Graduate via WebAdvisor
March 30 - April 3		Spring Recess (no classes, campus open)
May 18-22	(M-F)	Final exams week
May 22	(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.

Section 6.1

① Find the greatest common factor

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

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

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

⑥ $55 = 5 \cdot 11$ x^3 $GCF = \boxed{5x^3}$
$35 = 5 \cdot 7$ x^7

⑦ $3y - 6 = \boxed{3(y-3)}$

⑧ $14a^2 + 3a = \boxed{a(14a+3)}$

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

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