Math-15-E5146
Elementary Statistics

Semester & Year:	Spring 2014
Course ID and Section Number:	Math-15-E5146
Number of Credits/Units:	4 units
Day/Time:	T Th F 8:30 – 9:45 AM
Location:	SC 208
Instructor's Name:	Mr. Jon Pace
Contact Information:	Office hours: TBD Email: jonothan-pace@redwoods.edu or via MyCr

Course Description (catalog description as described in course outline):

The study of statistical methods as applied to descriptive statistics and inferential statistics. An emphasis on the meaning and use of statistical significance will be central to the course. Students will use frequency distributions, graphs, measures of relative standing, measures of central tendency, measures of variability, correlation, and linear regression to explore descriptive statistics. Students will use the laws of probability and statistical tests (t-tests, chi-square, ANOVA, and regression analysis) to make decisions via hypothesis testing and estimate parameters using confidence intervals.

Special notes or advisories: A TI-83 or TI-84 graphing calculator is required

Student Learning Outcomes (as described in course outline) :

1. Accurately communicate statistical ideas using correct statistical notation, graphs, and vocabulary.
2. Use descriptive and inferential statistics to solve real-world problems.
3. Demonstrate appropriate use of technology in making decisions based upon real-world data.
4. Read and interpret information that contains statistical analysis and be able to communicate these results.
5. Judge the validity of research reported in the mass media and peer reviewed journals.

Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that

necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.
Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course. The student code of conduct is available on the College of the Redwoods website at: http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.
College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

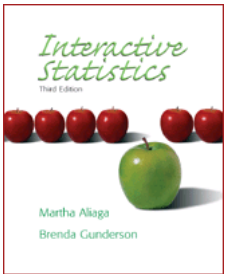
* I reserve the right to change this syllabus at any time.

Course Prerequisites

Math 120 or Math 194 (or equivalent) with a grade of "C" or better or appropriate score on the math placement exam.

***Describe representative skills without which the student would be highly unlikely to succeed*:** Intermediate algebra provides the mathematical content level needed to succeed in this course, as well as the ability to persist when the critical thinking involved becomes more advanced. Particular skills include the use of set-notation and logic, inequalities, square roots, function notation, linear functions, and percents. Ability to solve algebraic equations analytically, graphically, numerically and verbally in real-world settings. Ability to use technology in the study of these functions.

Materials you will need:



- **Required Text**: *Interactive Statistics*, 3rd Edition, by Aliaga & Gunderson. Published by Prentice Hall. 2006.

- **Graphing Calculator**: A Graphing Calculator, such as a TI-83 Plus, TI-84 is required. A limited number of calculators are available **for rent** from the CR Math Department.

- **Time.** It is critical to your success in this course that you read the book. You should budget this time requirement into your weekly time allotted for this course.

Resources Required:

1. Pencils and erasers **(pens may not be used in this class)**.
2. Ruler or straightedge.
3. **Graphing calculator.**
4. Graph Paper.
5. Note book for taking notes.

Recommended

1. Math Lab - Hours TBD

2. I would recommend forming study groups. They are a great way to study for exams and do homework problems.

3. The Math 15 course page (for your interest) is located at http://msenux.redwoods.edu/mathdept/outlines/current/math15.php

Classroom Environment

It is essential to our class that both students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful of one another. We are all adults and an open, comfortable environment is crucial for learning. Therefore, you should not hesitate to ask any questions or feel embarrassed to ask any question or seek help. **Turn off cell phones before entering the classroom**.

Homework

Reading —Statistics is a class that demands you read the book. Unlike other math classes, you will not be successful unless you read the book. It is recommended that you also work through the examples as you read.

Homework Exercises — Homework will be assigned after every class period. The homework assignments will be posted on our MyCr course site. It is extremely important that you do the homework as soon as you can and do not fall behind as it is difficult to catch up.

Exams and Quizzes

Short Quizzes — We will have short quizzes often. Some will be online in Optimath and some will be in-class. The in-class quizzes will take place at the beginning of class and can not be made up (you must be in class to take the quiz). Optimath quizzes will be open for a week and you can try them as many times as you like.

Unit Exams — We will have about 5 exams throughout the semester covering roughly 3 chapters each.

Final Exam — There will also be a comprehensive Final Exam on the last day of class.

Final Exam: Tuesday, May 13th 8:30 – 10:30 AM

Data Projects

There will be several short assignments for you to do that involve analyzing data, and turning in written assignments. Details will be provided separately.

Grades

Your final grade will be determined as follows:

OPTIMATH/ In-class Quizzes:	15 %
Homework:	20 %
Data Projects:	15 %
Exams:	40 %
Final Exam:	10 %

The grade breakdown is as follows:

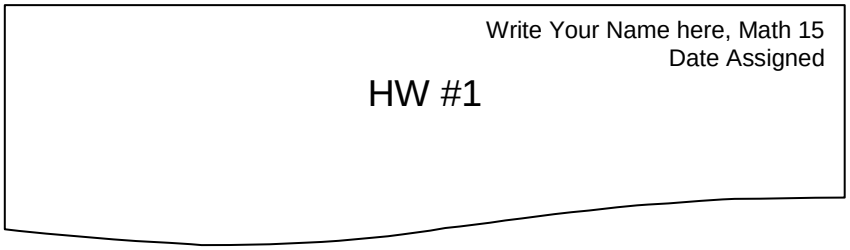
A	93 - 100%	C+	77 - 79%
A-	90 - 92%	C	70 - 76%
B+	87 - 89%	D	60 - 69%
B	83 - 86%	F	0 - 59%
B-	80 - 82%		

Attendance and Participation

It is expected that you come to class, be prepared, and arrive on time. I will take roll daily. You are responsible for any and all material covered in class, including quizzes.

Guidelines for Homework

Here are some very general instructions for how I want you to do your homework:



1. **You must use a pencil (NO PENS),** and erase carefully, when necessary.

2. Label each problem clearly, and ***paraphrase the question*** – you do not need to copy all the words of the question exactly as it is in the book, but you should write enough so that anyone looking at it (who does not have the book in front of them) can tell what it was that you were supposed to do.

3. Show your work – ***do not just turn in a list of answers***.

4. **Check all your answers in the back of the book before** turning it in. It is your responsibility to check your work and get help if and when you have questions.

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