Syllabus for Math 15 - Elementary Statistics – Eureka Campus		
Semester & Year	Spring 2017	
Course ID and Section #	Math 15 – E2509	
Instructor's Name	Kyle Falbo	
Day/Time	TThF/11:40-12:55	
Location	SC 210	
Number of Credits/Units	4.0	
Contact Information	Office location	HU 121
	Office hours	Thursday, 11:30-12:30
	Phone number	None
	Email address	Kyle-Falbo@redwoods.edu
Textbook Information	Title & Edition	Interactive Statistics, 3rd ed.,
		(Be aware that there is a "Redwoods Edition" of that is not an
		acceptable substitute for the current course textbook.)
	Author	Martha Aliaga & Brenda Gunderson.
	ISBN	ISBN: 0-13-149756-1

# **Course Description**

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.

## **Student Learning Outcomes**

- 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 <u>Disabled Students Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

#### Academic Support

Academic support is available at <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended</u> <u>Opportunity Programs & Services</u>, for eligible students, with advising, assistance, tutoring, and more.

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## **Academic Honesty**

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at:

<u>www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf</u> 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 website.

#### **Disruptive Classroom Behavior**

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at:

www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf Additional information about the rights and responsibilities of students, Board policies, and administrative precedures is located in the college setales and on the College of the Badwoods website

administrative procedures is located in the college catalog and on the College of the Redwoods website. **Emergency Procedures for the <u>Eureka</u> campus:** 

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at:

(<u>http://www.redwoods.edu/Eureka/campus-maps/EurekaMap\_emergency.pdf</u>). For more information on Public Safety, go to <u>http://redwoods.edu/safety/</u> In an emergency that requires an evacuation of the building:

- Be aware of all marked exits from your area and building.
- Once outside, move to the nearest evacuation point outside your building:
- Keep streets and walkways clear for emergency vehicles and personnel.
- Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

#### RAVE

College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to

<u>https://www.GetRave.com/login/Redwoods</u> and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or <u>security@redwoods.edu</u> if you have any questions.

# 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.

# Prerequisite

Math 120 or Math 194 (Intermediate Algebra) with a grade of C or better, or satisfactory performance on math placement exam.

Recommended Preparation: English 150

# Textbooks

The Mathematics Department continues to be concerned with the rising prices of textbooks. Students in Math 15 have a couple of options for obtaining a textbook:

- The CR Bookstore sells copies.
- You can also purchase the textbook online.
- You can purchase the textbook from a local bookseller (Tin Can Mailman has several copies).

ISBN Information: Interactive Statistics (Third Edition), by Aliaga and Gunderson, published by Prentice Hall ISBN 0131497561

(Be aware that there is a "Redwoods Edition" of that is not an acceptable substitute for the current course textbook.)

Online purchase recommendations:

- Online searches for the 3rd edition. Important: When doing online searches for the text, search by the ISBN 0131497561.
  - 1. A search of <u>Amazon.com</u> revealed <u>these prices and availability</u>.
  - 2. A search of <u>BookFinder.com</u> revealed <u>these prices and availability</u>.

# **Reading the Textbook**

It is important that you read and work the examples in the textbook before attemping the exercises. Many students will work the process in reverse. That is, they begin working the exercises, then if stuck, they page back through the narrative in the text seeking a similar example to the exercise on which they are working. This is **not** a recommended approach to the study of mathematics.

# Calculator

You are required to have a graphing calculator for this course. I recommend a TI-83 or TI-84. I will be using a TI-83 in class. The Math Department has rental calculators for \$20, but there are only a limited number available.

# Grading

Homework: 35% Exams: 35% Final Project: 15% Quizzes/Written Assignments: 15%

Due to privacy concerns, all discussions of grades must be done in person (no email). Please arrange a time to meet with me to discuss any grade concerns you may have. I encourage you to keep your returned assignments well organized for this very purpose as well as for review for exams.

# **Classroom Environment**

It is expected that everyone involved in this class, teacher and students alike, will act in a manner conducive to providing a comfortable environment for learning, a classroom where students feel free to ask and answer questions without fear of embarrassment or ridicule. It is important to stay on task when class is in session. Hence, conversation not pertaining to the subject at hand should be taken outside the classroom. I understand that students will have to get up and leave the room for various reasons and I also understand that students will arrive late from time to time. However, courtesy requires that you enter and leave as quietly as possible, without disturbing discussion or lecture. It is essential for student success to maintain a good environment in the classroom. If you have any personal difficulties with the learning environment in the classroom, please visit me outside of class to discuss them.

# Homework

Regular practice of mathematics is the tried and true way for understanding the material. Having good mathematical penmanship will make your ability to communicate mathematics effectively that much greater. The first part of the semester we will emphasize handwritten assignments, accompanied by weekly Optimath quizzes. As the semester progresses we will transition into looking at the statistical research aspect of the course. It is important that you become familiar and comfortable with the Optimath platform immediately. Late homework will not be accepted. I do understand that life happens and you may be unable to submit an assignment by its due date. To compensate for these times I will drop the two lowest homework assignments from your grade at the end of the semester. Homework assignments from the textbook will be submitted in pencil (No Pen!). Research assignments

Homework assignments from the textbook will be submitted in pencil (No Pen!). Research assignments will be typed and printed out for submission.

# Quizzes

There will be weekly online quizzes that will address the conceptual ideas from the reading and lectures. These quizzes will be posted on Optimath each Friday and due the following Tuesday before the start of class.

# Exams

There will be one mid-term and one comprehensive final exam. These exams will be closed book. I will provide time for in class review prior to the exams. However it is your responsibility to come prepared to these review sessions with questions or topics to discuss. Notice the dates associated with these exams early in the semester and plan any travel/appointments accordingly. No makeup exams will be given.

## Written Assignments

Throughout the semester I will walk you through the process of performing statistical research. You will be collecting statistical-based articles on topics that interest you, and conclude the semester with the beginning structure of the type of statistical research one would expect to perform on the topic of interest of your choice. There will also be a peer-review aspect to these assignments so be prepared to read your classmates work and provide thoughtful and respectful commentary.

#### Assistance

If you have a documented disability or believe you can benefit from any of the services offered by Disabled Student Programs & Services (DSP&S), please contact the DSP&S office 476-4280.