Syllabus for Elementary Statistics – Eureka Campus		
Semester & Year	Fall 2016	
Course ID and Section #	MATH 15 E0315	
Instructor's Name	Adam Falk	
Day/Time	Tuesday, Thursday, Friday 11:40AM – 12:55PM	
Location	SC208	
Number of Credits/Units	4 credits	
Contact Information	*Office hours*	By appointment only
	Email address	Adam-Falk@redwoods.edu
Textbook Information	*Title & Edition*	Interactive Statistics, 3rd edition
	Author	Martha Aliaga and Brenda Gunderson
	ISBN	ISBN-10: 0-13-14-756-1 ISBN-13: 978-0-13-149756-6

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 probability techniques to make decisions via hypothesis testing and will estimate parameters using confidence intervals. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. The course includes applications using data from disciplines including business, social sciences, psychology, life science, health science, and education

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

Academic Support

Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended

Opportunity Programs & Services, for eligible students, with advising, assistance, tutoring, and more.

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: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services, and scroll to AP 5500. 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: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services and scroll to AP 5500. 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.

Emergency Procedures for the Eureka 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: (http://www.redwoods.edu/aboutcr/Eureka-Map; choose the evacuation map option). For more information on Public Safety, go to http://www.redwoods.edu/publicsafety. 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 https://www.GetRave.com/login/Redwoods 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 security@redwoods.edu 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.

Objective:

Elementary Statistics is a survey course designed to cover common statistical ideas such as hypothesis testing, parameter estimation and linear regression techniques. The emphasis in this course will be conceptual understanding and critical thinking while mathematical computations will be accomplished via calculator technology.

What you need:

- **Required Textbook**

Interactive Statistics, 3rd Edition, by Aliaga and Gunderson. Published by Prentice Hall. 2006. The first chapter is available online:
http://esminfo.prenhall.com/math/aliaga/closerlook/popup_content_sample.htm

- **Graphing Calculator**

You are required to have a graphing calculator for this course. I recommend a TI-83, TI-84 or TI-89. I will be using a TI-84 in class. Calculators are available for rent from the math department for $20/semester; pay at the cashier's office and pick it up in the ASC. Also, check local pawn shops, Craigslist, Ebay, etc. *Your cell phone is not allowed to be used as a calculator.*

- **Bound Notebook with Grid Paper**

Something like Roaring Spring #77475 or Ampad #26-251 (about $2-$6), for example. It should be **bound** and have **graph paper** in it. You will use this throughout the course to build yourself a reference book.

MATH 15L - The Math Lab for Elementary Statistics:

All students in this class are encouraged to enroll in Math 15L, The Math Lab for Elementary Statistics. You may sign up for 0.5 - 1.0 units of credit. The Math Lab is located in the Academic Support Center in the library, and is open every weekday. The Math Lab is a great place to study or do your homework. You can receive help from one of the instructors on your homework, study for exams, or brush-up on your study skills by using one of the many computer programs installed on the network.

Canvas:

A canvas page will exist for this course. I primarily will use this site as a location to store course documents and send out important class announcements via email. Please do not use Canvas messaging services to communicate with me. Email me directly at adam-falk@redwoods.edu

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. Any rude or derogatory comments will be dealt with quickly and severely. 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 for help. **Please silence cell phones before entering the classroom**.

Homework

Written homework will be assigned for each section and will be due within two class periods. This allows you to ask homework questions before the assigned due date and the first 5-10 minutes of each class period will be devoted to discussing homework questions.

Homework will be a combination of hand-written assignments from the test, online assignments through Optimath, and take-home worksheets. Below are some guidelines for any written assignment.

1. Label each homework assignment clearly in the center at the top of the page with the homework section number.
2. At the top right side of the page, write your name and "**Math 15**" and the date.
3. Please use pencil, and erase carefully, when necessary.
4. Staple multiple pages in the upper left-hand corner (only if all pages are for the same section).
5. 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.
6. Show your work – do not just turn in a list of answers. A problem with just the answer and no work shown will not receive credit.
7. Work down the page – each problem should be below the one you just did (not next to it), though a two-column format would be fine.
8. When creating a graph, you must use graph paper and a ruler or straight edge. You must label your axes with the appropriate scales.
9. It is your responsibility to check your work and get help if and when you have questions.

Quizzes

Quizzes will be a combination of short (10-15 minute) in-class quizzes as well as online quizzes through Optimath. These quizzes may be announced or unannounced. We will also have group work and activities throughout the semester that will count toward your quiz grade.

Exams

There will be around 6 in-class or take-home exams. I will notify you at least one week in advance as to the date of each exam. Before each exam, you will receive a study guide and/or practice problems. Each exam needs to be taken on the scheduled date and time unless you make prior arrangements with me. There will be no make-ups on any exam except in the most extreme of circumstances.

Final Exam

A two-hour comprehensive final exam will be held in class on **Tuesday, December 13 from 10:45AM – 12:45PM**. Please make travel plans accordingly. THERE WILL BE NO MAKE-UP FOR THE FINAL EXAM.

Statistics Reference Book

During this course you will create your own personal Statistics Reference Book. In your reference book, you should write definitions, examples, and instructions of things that you learn in this class. The idea is for you to make your own book that will be useful to you throughout this and subsequent courses. You will be allowed to use your reference book on some quizzes and exams.

Your reference book is separate from your in-class notes!

Guidelines:

- **Purchase a book**. Get a bound notebook with grid paper (sometimes called "quad ruled"). Composition books range from $2 to $6 and are sold at the CR store, Staples, and other stores.
- **Make a title page**. Make the first page into a title page (make sure it is a right-side page). Create a title for your book and include identifying information so it could be returned to you if lost.
- **Table of Contents**. On the top of the page following your title page, write "Table of Contents" and reserve the next several pages (at least 3) for your table of contents to grow.
- **Number your pages**.
- **Enter information regularly**. Write in your reference book as you study and do your homework. Keep one topic on each page, even if you don't fill up the entire page with that topic (you may have more to add to it later).
- **What to include**: your reference book should include definitions of key terms, summarizations of main ideas, proper notation, formulas, as well as annotated examples.
- I will collect your reference book during exams and grade it on completeness, accuracy, and presentation.

Helpful Hints:

- Do a little bit at a time. Do not try to cram everything in your book the night before an exam. Have your book out when you are doing homework and maybe jot down a particularly challenging example you encounter. Throughout the semester I may also mention certain ideas or topics that you should include.
- Use colors! Maybe write/highlight definitions in green, examples in purple, important things to remember in red...and so on. Be creative!
- Don't write/highlight too much as it will be difficult to find what you're looking for during the Final Exam.
- Make it YOURS! Use colors, doodle in it, make it pretty, but try to keep it neat.

Grades

Homework:	20 %
Quizzes and activities:	20 %
Exams:	40 %
Final Exam:	20 %

A	90 - 100%
B	80 - 89%
C	70 – 79%
D	60 – 69%
F	Below 60%

Faculty Withdrawal of Students after Census Day

It is the policy of the College of the Redwoods Math Department to exercise a "Faculty Withdrawal" for any student who has missed more than 15% of the class meeting time (prior to the drop deadline), due to the severely diminished likelihood of a successful outcome in the course. It is important to note that, if it is the student's intention to withdraw from the course, the responsibility remains with the student to ensure the proper paperwork has been filed – that is, students are not to assume the teacher will file the Withdrawal.

THIS SYLLABUS IS SUBJECT TO CHANGE