Syllabus for: (name of class)
Elementary Statistics

Semester & Year:	Summer 2015
Course ID and Section Number:	Math-15-V8522
Number of Credits/Units:	4
Day/Time:	Asynchronous
Location:	Online
Instructor's Name:	
Contact Information:	Office location and hours: Phone: Email:todd-olsen@redwoods.edu

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.

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://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf

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.

Course Syllabus

Course Name: Elementary Statistics

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.

To watch an introductory video, click here ->

Introduction

(Links to an external site.)

(Links to an external site.)

Instructor: Garrett "Todd" Olsen

Course 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.

Computer Skills: Success in online courses depends in part on adequate computer skills. Students must be able to navigate the course website, open and download files, use a word processor and convert files to portable

document format (.pdf), take photos of written work and manage photographic file formats, and submit files to the Canvas course website. **The only acceptable file format for all submitted work is .pdf**. It is your responsibility to meet the technological demands of the course. Technological support is available via multiple online sources, and I will assist you in finding the most appropriate source for help.

Computer/Technology Requirements: Most computers and internet providers are adequate. I would recommend broadband services from cable, DSL, or satellite providers. You need to have reliable access to the internet and anticipate problems with your computer and internet access (including power outages) by not waiting until the last minute to submit assignments. It is your responsibility to meet the class deadlines.

File Format: Portable Document Format (pdf) is one of the most versatile and widely utilized file formats in use today. All files submitted for this course must be in pdf format and have a logical, descriptive file name that starts with your last name (example - OlsenHW1.pdf).
Mac users should be able to use Preview to convert image files to .pdf format. To test this possibility open an image file from the device you plan to use for taking the photos in Preview. If the image opens, you should be able to convert the file to .pdf using Preview. Here are the steps:

6.Open image file in Preview.
7.Go to file and select “export.”
8.In the export window under “format” choose PDF.
9.Click on “save” and give the new file an appropriate name.

Windows users – I must confess that I am a Mac user and not as familiar with the Windows platform. There are a number of free or inexpensive applications available on the internet for converting files. Here is a suggestion –
novaPDF
(Links to an external site.)

Textbook: *Interactive Statistics*, 3rd ed., Martha Aliaga and Brenda Gunderson.
The first chapter of the textbook is available here -> Interactive Statistics
(Links to an external site.)
The textbook is available at the CR textbook or can be purchased from an online retailer such as -> Online Purchase
(Links to an external site.)

Extra Credit Reading: *The Lady Tasting Tea*, Salsburg, David.

Calculators: You are required to have a calculator with a statistical package. Currently the Texas Instruments TI-83/84 is the best statistical calculator available and the one you must have for this course.

Grading:

Category	Weight
Homework	15%
Discussions	10%
Quizzes/Activities	20%
Essay Exams	40%
Final Exam	15%

Class Participation: You must check in with your Canvas account for this course regularly as this is not a self-paced course and assignments will be added regularly throughout the semester. Most weeks you will have a reading and homework assignment from the textbook, class discussions and/or activities to participate in, and video lectures to watch.

Homework: Homework is absolutely essential to the learning of Statistics. One cannot learn Statistics without doing Statistics. Regular homework will be assigned and due dates will be clearly noted in Canvas. Your homework will be evaluated on accuracy, completeness and neatness.

Homework Format: You will complete the homework assignments using paper and pencil then photograph each page with a smart phone, digital camera, or other electronic device. Your homework assignments must be in .pdf file format. You are responsible for uploading these files into Canvas before the deadline.

Activities: You will be assigned activities during the course. Each of these assignments will be completed using the same format as the homework assignments above.

Discussions: You are required to participate in all discussions during the semester. Please note that participation in these discussions is part of your grade for this course. Your score for this part of the grade will be based on the quality and frequency of your posts.

Quizzes: Quizzes will be administered via Canvas' "Quizzes" tool. These are open-book quizzes, but you should **prepare as you would for a face-to-face class**. You are limited to a total of 30 minutes for each quiz and will not have time to search and find answers in the lectures or textbook. The quiz will cover the material covered since the previous quiz. Each quiz will be posted to Canvas, and you may take the quiz anytime during the open period. Once you start the quiz though the clock starts, and you will have 30 minutes to complete the quiz. You are expected to follow the class code of conduct (see below).

Essay Exams: You will be assigned two take-home essay exams during the semester. You are encouraged to work together on these projects, and you are required to share your ideas and critique each other's work. Each of these projects will follow a schedule of drafts culminating with a final report. Your grade for each of these projects is based on the quality of your participation in this process as well as the quality of your final report.

Final Exam: The final exam for this course will be cumulative and consist of problems similar to the quizzes as well as short essay questions. The final exam will be administered via Canvas. The final exam is open-book, but you should **prepare as you would for a face-to-face class.** You are limited to 2 hours for the final exam and will not have time to search and find answers in the lectures or textbook. You are expected to follow the class code of conduct (see below).

Extra Credit: You may earn extra credit by reading *The Lady Tasting Tea* and completing a short essay. There are five extra credit assignments available. Each extra credit assignment replaces your lowest quiz or activity score with a perfect score of 10 points provided that the extra credit assignment fulfills the length requirement and contains sufficient detail.

Code of Conduct: Please familiarize yourself with the Student Code of Conduct Standards in the college catalogue under campus policies and regulations. It is required that you do your own work. All papers, postings, activities, and exams must be competed by you without assistance. Any source used external to the course must be cited. Please be respectful to your classmates and be kind and considerate in all of your postings and responses.

Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day: A student who is absent from class for the amount of time equal to two weeks of classes, will be withdraw from the course, unless there are extenuating circumstances that are communicated to the instructor in

a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.