Syllabus for Elementary Statistics – Online		
Semester & Year	Spring 2017	
Course ID and Section #	Math-15-V1087	
Instructor's Name	Garrett "Todd" Olsen	
Day/Time	Asynchronous	
Location	Online	
Number of Credits/Units	4	
Contact Information	*Office location*	
	Office hours	
	Phone number	
	Email address	todd-olsen@redwoods.edu
Textbook Information	*Title & Edition*	
	Author	
	ISBN	

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: www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.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 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 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/Eureka/campus-maps/EurekaMap_emergency.pdf). For more information on Public Safety, go to http://redwoods.edu/safety/ 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.

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

Instructor: Garrett "Todd" Olsen

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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.

Textbook: *Interactive Statistics*, 3rd ed., Martha Aliaga and Brenda Gunderson (ISBN - 0-13-149756-1). The first chapter of the textbook is available here -> Interactive Statistics

Required Novel: *Naked Statistics*, Charles Wheelan (ISBN - 978-0-393-34777-7)

Calculator: You are required to have reliable access to a Texas Instruments TI-83 or TI-84 graphing calculator. This is currently the best statistical calculator available and the one you must have for this course.

Grading:

Category	Weight
Homework	15%
Discussions	15%
Quizzes/Activities	15%
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 and *Naked Statistics*, class discussions and/or activities to participate in, and video lectures to watch.

Homework: 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, in the correct format into Canvas before the deadline.

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).

CamScanner: Camscanner is a free app available for most smartphones and tablets. Past students in this course have preferred this app for creating the required pdf "scans" of documents. Please follow the link below to learn more and download the app. CamScanner

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 will have limited time 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).

Naked Statistics is a novel about statistics. Within are stories and simple explanations for key statistical concepts. This novel is a required reading from which graded discussions and quiz questions will

come. You are given a reading schedule within the homework assignments, but are also encouraged to read this novel sooner if possible as its contents are meant to enrich your understand of statistical thought.

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).