

Syllabus for Introduction to Statistics

Course Information

Semester & Year: Sprig, 2022

Course ID & Section #: Math 15, V2874 Instructor's name: Garrett "Todd" Olsen

Day/Time or *Online: Online Location or *Online: Online

Number of units: 4

Instructor Contact Information

Office location or *Online: Online

Office hours: N/A
Phone number: N/A

Email address: todd-olsen@redwoods.edu

Required Materials

Textbook title: *Interactive Statistics*

Edition: 3rd

Author: Martha Aliaga and Brenda Gunderson

ISBN-13: 9780134995465

Textbook title: *Naked Statistics*Author: Charles Wheelan
ISBN: - 978-0-393-34777-7

Other Materials:

- Calculator: Texas Instruments TI-84 graphing calculator.
- TI-84 Graph Link Cable.
- TI Connect TI-84 Graph Link Software.
- A digital camera, smart phone or other device capable of taking photos that can be converted to PDF format.

Catalog Description

An introduction to basic concepts of descriptive and inferential statistics, with emphasis on the meaning and use of statistical significance. Students will use probability techniques to make decisions via hypothesis testing and will estimate parameters using confidence intervals. The course includes applications from a variety of technical and social science fields.

Course Student Learning Outcomes

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

Evaluation & Grading Policy

Grade Categories and Weights		Letter Grade Assignment	
Homework Discussions Quizzes/Activities In-depth Analysis Project Linear Regression Project Final Exam	15% 15% 20% 20% 15%	A: 90 – 100% B: 80 – 89% C: 70 – 79% D: 60 – 69% F: Less than 60%	

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).

Activities: You will be assigned several activities during the course. You are welcome to collaborate with anyone you wish on these assignments, but the final writeup must be your own work.

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 a fixed amount of time to complete the quiz. You are expected to follow the class code of conduct on quizzes (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 understanding of statistical thought.

In-depth Analysis Project: For this project you will select a particular statistical study published in a peer-reviewed journal and do an in-depth analysis of the statistical issues applicable to the study. You are free to and encouraged to work together on these projects.

Linear Regression Project: For this project you will do a complete linear regression analysis using data culminating in a properly formatted 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 3 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. You are expected to follow the class code of conduct on quizzes (see below).

Student feedback policy

In a face-to-face course, students would be expected to come to each class during the semester. Similarly, you are expected to "come to class" in this course by logging into Canvas and participating in this course. While some online courses are self-paced, this one is not. Each week new assignments open, new discussions (some graded and some not graded) are assigned, and announcements are made. To be engaged, students must take the initiative to log in and participate.

The Canvas message tool is the way to stay in contact with me. Students who do well in this course message me regularly with questions about the reading, homework problems and video lectures. It is important to send detailed questions. The process of writing your question out in detail becomes part of the learning experience in this course and also helps me to focus my explanations.

Often when I write an elaborate explanation to a particular student, one that I believe would benefit the entire class, I will post it as an announcement. Any student may then post a follow up question or comment as a "reply" to the announcement.

Special accommodations statement

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 accommodations, please see me or contact <u>Disability Services and Programs for Students</u>. Students may make requests for alternative media by contacting DSPS based on their campus location:

• Eureka: 707-476-4280, student services building, 1st floor

• Del Norte: 707-465-2324, main building near library

Klamath-Trinity: 530-625-4821 Ext 103

Submitting Work

All work for this course must be submitted via Canvas. Many assignments in this course require file uploads which as explained in more detail below must be converted to PDF file format. Once converted to PDF format, these files are then uploaded into Canvas via the assignment's portal. This is the only way in which required file uploads will be accepted. Work submitted as attachments to Canvas messages or email messages will not be opened or downloaded to my computer.

Hard Deadline

All work for this work must be submitted on or before May 13, 2022. After this date all assignments in Canvas are permanently locked.

Contesting a Grade

Students have one week from the time an assignment has been graded to contest the grade with me. If for any reason you are not sure why you earned the grade you received, or if you unclear on the grading policies, please message me via the Canvas messaging system.

Drop/Withdrawal

Student-initiated withdrawal may occur through the second week of class with nothing recorded in the student transcripts and from week's 2-10 with a recorded W (withdrawal). Administrative procedure (AP) 5075 allows instructors to withdraw students from class for non-participation through the 10th week of class. Non-participation for may result in involuntary withdrawal. No course withdrawal is allowed after the 10th week of class.

Examples of non-participation:

- Failure to submit work or post to discussions.
- Failure to submit a rough draft of Essay Exam 1 within the assignment's grace period.
- Consistent late work and excessive missing assignments.

Incomplete Grade

As a general rule, I do not give incomplete grades. This does not mean, however, that I will not consider such a grade. Only with *extreme and unpredictable extenuating* circumstances, happening at the very end of the semester will I consider an incomplete grade. College of the Redwoods has strict guidelines with regard to a grade of incomplete (see the <u>catalog</u>). Incompletes are not an option to repair a low grade earned throughout the semester. A student must have already demonstrated significant and successful course progression beyond the last date to drop the course to be considered for an incomplete.

Canvas Information

Your commitment will require at least as much time as you dedicate to a traditional class. A typical four credit hour class will require at least 14 hours per week of your time. You will need to carefully watch online lectures and read textbook chapters, participate in online activities and watch online videos, participate in online discussions, complete quizzes, and submit a final project. Conscientiousness, attention to details, and skills in reading and writing are critical for success. 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. You should be logging into Canvas at least three or four times each week to see new announcements, discussions that are happening, and new assignments coming that are coming up.

Log into Canvas at https://redwoods.instructure.com
Password is your 6 digit birth date
For tech help, email its@redwoods.edu or call 707-476-4160

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

This is not a course that can be successfully completed using a phone or tablet. There is a great deal of writing required, and a computer with a keyboard is a necessity. Also, even though Canvas works with most internet browsers, my experience has been that Firefox is the most reliable browser to use with Canvas. You also need to have reliable access to the internet. I would recommend broadband services from cable, DSL, or satellite providers.

Students can obtain a free Office 365 license (includes Word, Excel, PowerPoint and more) with a valid CR email.

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.

This syllabus is not intended to be nor should it be construed as a contract. This syllabus is meant to be a guide and source of information about the course. As your professor, I reserve the right to make changes and adjustments in the syllabus in light of developments in circumstances and unforeseen needs of the class.