

Syllabus for Introduction to Statistics

Course Information

Semester & Year: fall, 2023

Course ID & Section #: Math 15, V5444 Instructor's name: Garrett "Todd" Olsen

Day/Time: Online/Asychronous

Location: Online
Number of units: 4

Instructor Contact Information

Office location: 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 Required Materials:

- Calculator: Texas Instruments TI-84 graphing calculator.
- 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 | 15% | A: 90 – 100% |
| Discussions | 15% | B: 80 – 89% |
| Quizzes/Activities | 20% | C: 70 – 79% |
| In-depth Analysis Project | 20% | D: 60 – 69% |
| Linear Regression Project | 15% | F: Less than 60% |
| Final Exam | 15% | |
| | | |

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 provided in the assignment 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).

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 <u>Firefox</u> 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.

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.

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 July 20. 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.

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.

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or <u>Disability Services and Programs for Students</u> (DSPS). 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

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Academic dishonesty

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. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the <u>College Catalog</u> and on the <u>College of the Redwoods website</u>. Additioinally, submitting text generated using AI language models such as ChatGPT will be considered as plagorized and will not receive credit in this course.

Disruptive 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, the student 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. 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.

Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact <u>Admissions & Records</u> to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. This does not change your legal name in our records. See the <u>Student Information Update form</u>.

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at https://redwoods.instructure.com

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: https://webapps.redwoods.edu/tutorial/

Canvas online orientation workshop: Canvas Student Orientation Course (instructure.com)

Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges Health & Wellness website.

<u>Wellness Central</u> is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor https://webadvisor.redwoods.edu and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the Redwoods Public Safety Page.

In an emergency that requires an evacuation of the building anywhere in the District:

- 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 campus authorities.

Del Norte Campus Emergency Procedures

Please review the <u>Crescent City campus emergency map</u> for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information, see the <u>Redwoods Public Safety Page</u>.

Eureka Campus Emergency Procedures

Please review the <u>campus emergency map</u> for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the <u>CR Police Department-Public Safety</u> It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

- 1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
- 2. Dial 911, to notify local agency support such as law enforcement or fire services.
- 3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
- 4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
- 5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
- 6. If safe to do so, notify key administrators, departments, and personnel.
- 7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

Klamath Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to communicate to faculty, staff, students and the general public during an emergency. It is the responsibility of College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to protect life and property from the effects of emergency situations within its own jurisdiction.

- 1. In the event of an emergency, communication shall be the responsibility of the district employees on scene.
 - a. Dial 911, to notify local agency support such as law enforcement or fire services.
 - b. If safe to do so, notify key administrators, departments, and personnel.
 - c. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
 - d. Contact 530-625-4821 to notify of situation.
 - e. Contact Hoopa Tribal Education Administration office 530-625-4413
 - f. Notify Public Safety 707-476-4111.
- 2. In the event of an emergency, the responsible district employee on scene will:

- a. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
- b. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
- c. Close all window curtains.
- d. Get all inside to safe location Kitchen area is best internal location.
- e. If a police officer or higher official arrives, they will assume command.
- f. Wait until notice of all is clear before unlocking doors.
- g. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
- h. Do not leave site, unless it has been deemed safe by the person in command. Student Support Services (required for online classes)

Student Support Services

The following online resources are available to support your success as a student:

- CR-Online (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook

<u>Counseling</u> offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- <u>Academic Support Center</u> for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center

Special programs are also available for eligible students include

- Extended Opportunity Programs & Services (EOPS) provides services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4year universities, career assessments, and peer mentoring. Students can apply for the program in <u>Eureka</u> or in <u>Del Norte</u>
- The <u>Veteran's Resource Center</u> supports and facilitates academic success for Active Duty Military, Veterans
 and Dependents attending CR through relational advising, mentorship, transitional assistance, and
 coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821