

# Syllabus for Math 15 – Intro to Statistics

## Course Information

Semester & Year: Fall 2020

Course ID & Section #: Math-15-K1068 (051068)

Instructor's name: Danny Ammon

Day/Time of required meetings: The lecture part of this class Math 15 is asynchronous; the required support class Math 15S is synchronous online and will meet via Zoom on Tuesdays and Thursdays from 7:30-8:55 pm.

Course units: 4 units + 1 unit for Math 15S

## Instructor Contact Information

Office location or \*Online: Online via Zoom

Office hours: email instructor to arrange help via Zoom in addition to support course synchronous hours on Tuesdays and Thursdays from 7:30-8:55 pm

Email address: danny-ammon@redwoods.edu

## Required Materials

Textbook title: *See book options below*

Other requirement: Statcrunch account

## Catalog Description

Math-15 is 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 (*from course outline of record*)

1. Accurately communicate statistical ideas using correct statistical notation, graphs, and vocabulary.
2. Use descriptive and inferential statistics to better understand 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.

## Prerequisites/co-requisites/ recommended preparation

The MATH-15S support course is required.

# Welcome to Class!

Statistics is an incredibly relevant topic in our society. It is used in news, business, politics, academic research, and in every field that uses data. Understanding statistics will not only further your educational and career goals, but help you be an informed citizen and consumer.

You may be intimidated by this class, but don't worry! This is not your typical math class. *Statistics is about critical thinking.* At its heart, statistics uses data to answer questions. And even though it involves math, many people find that their intuition goes a long way in this class. *Statistics is best learned hands-on.*

## Things You Should Know

### **Time Commitment**

This class will keep you busy! We have asynchronous class lectures and a lot of homework. You should be ready to commit at least 12 hours per week to work. At the beginning it can feel a little overwhelming, but in the first few weeks you'll find your pace.

### **Math 15S – Co-requisite Support**

This class is linked with a co-requisite support course Math 15S. Essentially the support course builds in more time into class each week so that we can learn statistics hands-on. We also address some other important skills. In order to be enrolled in this section, you must be enrolled in Math 15S as well. The Math-15S section is required and synchronous over Zoom and will meet Tuesdays and Thursdays from 7:30-8:55 pm.

### **Class Rules**

As a general rule, *be respectful to your classmates and help provide a healthy environment for learning.* Give your full attention to the material or activities we are working on.

# Grading

## **Canvas Exercises/Quizzes & Discussion Boards .....20%**

Instead of using a textbook we'll be using an interactive course in Canvas that will give you readings and have you immediately work with the material. It will also require you to interact with problems in discussion boards which provide you a chance to work through a problem and then get/give feedback. Giving and getting feedback is critical to making sure you gain increased mastery of the material.

## **Canvas Checkpoint Quizzes .....20%**

We'll have lots of medium sized Checkpoint Quizzes. At the end of each unit you'll have an online Checkpoint Quiz. The Quiz allows you three attempts, and we keep the best grade. *Quizzes are for learning*. It allows you to show how you're doing with the material, and give you an early alert if you're missing something.

## **Final Project.....20%**

Instead of a Final Exam, we will do a Final Project. There will be more information later about the Final Project but you will have multiple options on what to do and you should be able to find a topic that interests you.

## **Reading Reports.....20%**

There are some important parts of statistics we won't get a lot of time to discuss. Instead I'm assigning three possible books for you to read. You choose the book that you think you'll get the most out of, and you will give periodic written reports on the reading. I am also allowing an option to read news articles and reports involving statistics.

## **Participation.....20%**

You will be given credit for attending the online Zoom 15S sections. Additionally, you will send a paragraph for each asynchronous lecture stating what the lecture was about.

## **Falling Behind**

Despite our best efforts, sometimes life gets in the way of school. Sometimes other classes end up requiring more work than expected, so school gets in the way of school! I've been there in both cases and have had to drop classes mid-semester because I had too much on my plate. So I totally understand. I'm here to help you and don't feel like you owe me an apology for doing your best to balance your life. But let's assume the worst happens, and for some reason you fall behind...

If I notice that you are falling behind, I'm going to reach out by email and offer to help. But at some point you can get so far behind that there's no way you'll pass the class. If this happens, you can withdraw from the class. This means you get a W instead of an F on your transcript, which is much better for your GPA

## **Appealing a Grade**

If you believe you have received the wrong (or an unfair) grade for an assignment, please communicate this to me! I'm totally willing to admit when the mistake is on my end. If you earned the points, you deserve the points.

## Course Packets

During class we'll be using packets to guide the discussion. These packets will be available to download on Canvas. The material in this packet was made for online distribution by the collaboration with the faculty at Los Medanos Community College (LMC) and Cuyumaca Community College (CCC). They have been edited by Levi Gill, Mathematics Professor at College of the Redwoods, with permission.

## Reading Report Options

You will have to read **one** of the following books for this class. My advice is buy them used, or check them out from the library. You may also be able to purchase from Amazon and read online with the Kindle reader.

*Naked Statistics* by Charles Wheelan

ISBN: 039334777

This is a book is a good introduction to the topic of statistics as it's used in society today. It will reinforce and further inform you on the topics we discuss in this class.

*The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century* by David Salsburg

ISBN: 0805071342

One of the neat things about statistics is that it is relatively new discipline. Most everything you would learn in algebra has been known for hundreds if not thousands of years. But statistics has been developed over the last one hundred years. In this book, David Salsburg weaves the topics of statistics together with the stories of the people who created them.

## Technology

We'll be using this software for statistical calculations and analyzing data. You can purchase a 6-month license

\$13.00 at [www.statcrunch.com/get-access](http://www.statcrunch.com/get-access)

### Basic Scientific Calculator

You want a calculator for **basic** computations. At the very least it needs to be able to take a square root, so look for the  $\sqrt{\quad}$  button. You don't need a big, fancy graphing calculator, but if you already have one you can use it.

## Accessibility

Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.

College of the Redwoods is also 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 [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1<sup>st</sup> floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19, approved accommodations for distance education classes will be emailed to the instructor by DSPS. In the case of face to face instruction, please present your written accommodation request to your instructor at least one week before the first test so that necessary arrangements can be made. Last-minute arrangements or post-test adjustments cannot usually be accommodated.

## Support for online learners during COVID-19

In response to COVID-19, College of the Redwoods moved the majority of its courses online to protect health and safety. As the faculty and students adjust to this change, clear communication about student needs will help everyone be successful. Please let me know about any specific challenges or technology limitations that might affect your participation in class. I want every student to thrive.

## Evaluation & Grading Policy

Canvas Exercises/Quizzes & Discussion Boards .....	20%
Canvas Checkpoint Quizzes & In Class Quizzes.....	20%
Reading Reports.....	20%
Final Project .....	20%
Participation.....	20%

A	90	≤	Grade	
B	89	≤	Grade	< 80
C	79	≤	Grade	< 70
D	69	≤	Grade	< 60
F	59	≤	Grade	

## Admissions deadlines & enrollment policies

Fall 2020 Dates

- *Classes begin: 8/22/20*
- *Last day to add a class: 8/28/20*
- *Last day to drop without a W and receive a refund: 9/4/20*
- *Labor Day (all-college holiday): 9/7/20*
- *Census date: 9/8/20 or 20% into class duration*
- *Last day to petition to file P/NP option: 9/18/20*
- *Last day to petition to graduate or apply for certificate: 10/29/20*
- *Last day for student-initiated W (no refund): 10/30/20*

- *Last day for faculty initiated W (no refund): 10/30/20*
- *Veteran's Day (all-college holiday): 11/11/20*
- *Fall break (no classes): 11/23/20-11/28/20*
- *Thanksgiving (all-college holiday): 11/25/20-11/27/20*
- *Final examinations: 12/12/20-12/18/20*
- *Semester ends: 12/18/20*
- *Grades available for transcript release: approximately 1/8/21*

Students who have experienced extenuating circumstances can complete & submit the **Excused Withdrawal Petition** to request an Excused Withdrawal (EW) grade instead of the current Withdrawal (W) or non-passing (D, F & NP) grades. The EW Petition is available from the Admissions and Records Forms Webpage. Supporting documentation is required.

## 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 [College Catalog](#) and on the [College of the Redwoods website](#).

## 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 [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the [Student Information Update form](#).

## 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](mailto:its@redwoods.edu) or call 707-476-4160

Canvas Help for students: <https://www.redwoods.edu/online/Help-Student>

## 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](#).

[Wellness Central](#) 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](mailto: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](mailto: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.

## 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 Jolene Gates 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](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- [Academic Support Center](#) 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 financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- The [Veteran's Resource Center](#) 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