

## Syllabus for Math 15 Introduction to Statistics – Del Norte Education Center

<b>Semester &amp; Year</b>	Spring 2019	
<b>Course ID and Section #</b>	Math 15 D6019	
<b>Instructor's Name</b>	Levi Gill	
<b>Day/Time</b>	TTh 2:05-4:10 PM	
<b>Location</b>	DM 15	
<b>Number of Credits/Units</b>	4	
<b>Contact Information</b>	<i>Office location</i>	E2
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<b>Textbook Information</b>	<i>Title &amp; Edition</i>	
	<i>Author</i>	
	<i>ISBN</i>	

### 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 707-465-2352.

### 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.

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### 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 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>. 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; 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 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>.

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### Emergency Procedures for the Del Norte campus:

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Crescent City campus emergency map is available at (<http://www.redwoods.edu/delnorte/Maps-and-Directions>; scroll down to the Safety Map). For more information on Public Safety, go to <http://redwoods.edu/publicsafety> 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 campus authorities.

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](http://redwoods.edu)." Please contact Public Safety, 707-476-4112, [security@redwoods.edu](mailto: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.*

## 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*

In this class we will be learning interactively, which means our classes won't be primarily lecture-based but will involve interactive group work.

## Things You'll Need

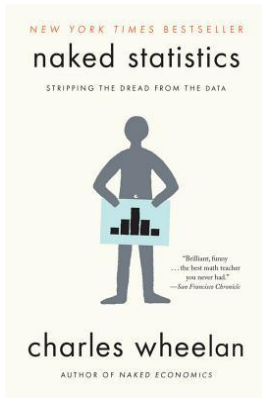
### A book

You will have to read **one** of the following books for this class. Here are your options.

*Naked Statistics* by Charles Wheelan

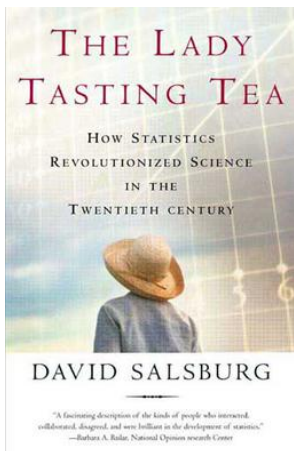
ISBN: 039334777

If you've read this book already (example Math 102 students), then you can't use this one. Otherwise, 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



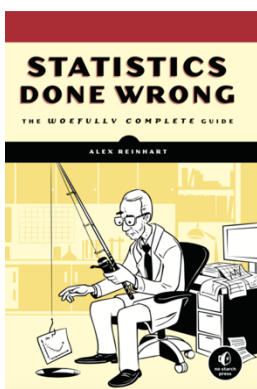
*The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century* by David Salsburg  
ISBN: 0805071342

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 the people who created them.



*Statistics Done Wrong: The woefully complete guide* by Alex Reinhart

If you are going to use statistics after this class, then this is the book for you. It will build on the concepts we're learning and explain the boundaries and limits of the methods. It will also help you recognize when a study is using statistics improperly.





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)



## Open Learning Initiative

Transforming higher education through the science of learning.

Your homework will be done through the OLI platform. This platform works as an interactive textbook. You read a section and then do some problems. At the end of each section there is a quiz. The subscription for this is \$20.

### 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.

### Composition Notebook (optional, but strongly recommended)



## Grades

OLI Homework	25%
Reading Reports	25%
Writing Assignments	25%
Checkpoints	15%
Class Activities	10%

## Grading Scale

A	$94 \leq \text{Grade}$
A-	$90 \leq \text{Grade} < 94$
B+	$87 \leq \text{Grade} < 90$
B	$82 < \text{Grade} < 87$
B-	$80 \leq \text{Grade} \leq 82$
C+	$78 \leq \text{Grade} < 80$
C	$70 \leq \text{Grade} < 78$
D	$60 \leq \text{Grade} < 70$
F	$\text{Grade} < 60$

## Things You Need to Know

### Appealing a Grade

If you believe you have received the wrong (or an unfair) grade for an assignment, please come talk! I am completely open to discussing that with you.

### Class Rules

As a general rule, *be respectful to your classmates and help provide a healthy environment for learning.* Please do not talk unnecessarily during class, arrive on time and leave when class is dismissed. When you attend, give your attention to the material or activities we are working on.

### Instructor Drop

If you miss more than two weeks of classes without approval, you could be dropped from the class. This is to protect your grade since you will receive a W instead of an F. However, you will not be dropped without the instructor reaching out to you first.

### Important Dates

Last Day to Add a Class	Jan 25
Last Day to Drop without a W	Feb 1
Presidents Weekend (no classes Fri & Mon)	Feb 15-18
Last Day to Petition to Graduate	March 7
Spring Break (no classes all week)	March 18-23
Last Day to Drop or Be Dropped	Apr 5
Finals	May 11-17