Syllabus for Math 15 – Online		
Semester & Year	Fall 2016	
Course ID and Section #	Math 15 – V2217	
Instructor's Name	Michelle Moreno	
Day/Time	Online	
Location	Canvas	
Number of Credits/Units	4	
Contact Information	*Office location*	Online
	Office hours	By appointment
	Email address	Moreno.CR.Math@gmail.com Michelle-Moreno@redwoods.edu
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Textbook Information	*Title & Edition*	Interactive Statistics, 3ed.
	Author	Aliaga & Gunderson
	ISBN	ISBN: 0-13-149756-1

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.

Math 15 V2217 – Summer 2016

Instructor: Michelle Moreno

Email: moreno.cr.math@gmail.com or michelle-moreno@redwoods.edu (Use gmail for faster reply)

Time & Location: Online via Canvas

Prerequisite: Math 120 or Math 194 (Intermediate Algebra) with a grade of C or better, or satisfactory performance on math placement exam.

Recommended Preparation: English 150

Required Materials: *Interactive Statistics*, 3ed. by Aliaga & Gunderson ISBN: 0-13-149756-1
TI-84 (or TI-83) Calculator. No other calculator will be supported by the instructor

Course Objectives: This is an introductory course to the science of statistics. Statistics is about making sense out of data. At the most basic level statistics is how to organize data. At the other end of the spectrum is inferential statistics where you make decisions/inferences based upon the data. There are two primary goals for this course:

1. Properly collect and analyze a set of data.
2. Critically examine statistical information presented both in the media and in peer-reviewed journals.

Course Structure: This course, beginning August 29 and ending December 12, will operate fully online utilizing Canvas.

To be successful in this online course, you need to do the following:

1. **Attend class!** That means checking into Canvas regularly and participating in the discussion forums. Ask questions in the forum when you are unsure of how to solve a problem or do not understand a particular concept. If you know how to answer someone else's question in the forum, do so! This course, whether online or face-to-face, operates best when classmates play as a team. The best way for you to understand these new concepts is to talk about them with your team.

2. **Watch the assigned videos.** This will serve as your class time and I will provide you lecture just as I would in a face-to-face class. The only difference is you obviously won't be able to stop and ask me questions. As you watch the videos, actively participate by taking notes (just as you would in class), follow along and work through the LDI's in the textbook as I work through them in the videos, and keep note of any questions that arise so that you can post them in the discussion forum when you have completed the lecture for that day.

3. **Complete the homework assignments on-time.** Do NOT just copy the answers from the back of the book. The topics we will cover in this class

will be new for most of you. You will not learn them if you do not put the hard work in. If you do get stuck, post your question in the proper discussion forum where we can talk about it and get you un-stuck. Homework assignments will be turned in online. You will need to either type your homework (if you are savvy with typing formulas and creating graphs), or have a way of scanning or taking a picture of your written work in order to upload it. Please do not use uncommon programs or file types. I need to be able to open your file. Also, please make sure your scans and/or pictures are right side up!

4. **Participate in the discussion forums.** Ask questions when you have them! Please do not post vague questions. Be detailed. State the problem and page number you are working on. Be specific as to what your question is. Answer questions when you are able. Do not just post a solution. Make sure that if you give someone a solution that you are providing explanation. Remember, our goal is to make sure our team learns these concepts. Our goal is NOT to just complete assignments.

5. **Complete quizzes and exams on-time.** You will have several quizzes on our Optimath system (see below for more info). Pay attention to due dates in Canvas. You will also have four exams. Detailed exam information will be available to you in Canvas on the first day of class and you will have several weeks to complete each of them, with exception of the final.

   Exam 1: Analysis of the book, *How to Lie with Statistics*, by Darrell Huff. You may purchase a hard copy online for about $6. There is also a pdf version that I will provide to you in Canvas.
   Due on Sunday September 11 at 11:59pm.

   Exam 2: Analysis of the media vs. science. You will assess the validity of a media article and compare that to the actual scientific study the media piece is based on. **Due on Sunday October 16 at 11:59pm.**

   Exam 3: Data collection and analysis project. For this exam you will have the opportunity to design your own study, collect data, analyze the data, and draw a conclusion. **Due on Monday December 12 at 12pm.**

   Final Exam: Final exam will be available on **Sunday Dec. 11 at 12pm through Monday Dec. 12 at 12pm** only. Make your plans accordingly!

Grading:

Participation	10%	A- 90-92%	A 93-100%	
Homework	15%	B- 80-82%	B 83-86%	B+ 87-89%
Quizzes	10%	C 70-76%	C+ 77-79%	
Exam 1	10%	D 60-69%		
Exam 2	15%	F < 60%		
Exam 3	15%			
Final	25%			

Rounding up to the next grade will be considered for each student and the decision will be based on effort, attitude, attendance and participation.