Syllabus for Math 15 Statistics– Eureka Campus

Semester & Year	Spring 2017
Course ID and Section #	Math 15-E1085
Instructor's Name	Michelle Moreno
Day/Time	TThF 8:30-9:45
Location	SC 208
Number of Credits/Units	4

Contact Information	*Office hours*	By appointment
	Email address	michelle-moreno@redwoods.edu
		moreno.cr.math@gmail.com
	Course Home	https://redwoods.instructure.com
Textbook Information	*Title & Edition*	Interactive Statistics, 3rd ed.
	Author	Aliga & Gunderson
	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/AP5500StudentConductCodeandDisciplinaryProcedure srev1.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/AP5500StudentConductCodeandDisciplinaryProcedure srev1.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 <u>Eureka</u> 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.

Math 15 – E1085 – Spring 2017
Syllabus

Instructor: Michelle Moreno

Email: Michelle-Moreno@redwoods.edu or Moreno.CR.Math@gmail.com
              (use gmail for quicker response)

Recommended Preparation: English 150

Required Materials: Interactive Statistics, 3rd. ed by Aliaga & Gunderson
                              ISBN: 0-13-149756-1

                              TI-83/84 calculator.

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.

To be successful in this course you must do the following:
1. Attend class AND participate.
2. Complete the homework assignments to the best of your ability BEFORE class. I will provide assistance but you will not learn if you do not first attempt the assignments on your own.
3. Do NOT procrastinate. You will have three take-home exams and several weeks to work on them. If you procrastinate you will miss out the purpose of the exams.
4. Be prepared to take a short quiz each week. You may or may not have notice of when quizzes will be given or what they will cover. I am interested in what you know, not what you crammed for.
5. Do NOT be distracted by text messages, phone calls, Facebook, etc. Your success depends on you being focused while in class.

Exams: You will have three take-home exams and will have several weeks to complete each one. Do NOT procrastinate! The semester will conclude with a mandatory Final Exam that will be taken in class during the assigned final exam time for this section.

> **Exam 1**: Analysis of the book, *How to Lie With Statistics* by Darrell Huff. Details are in the Assignments section in Canvas.
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> **Exam 2**: Analysis of media vs. science. You will assess the validity of a media article and compare to the actual scientific study the media piece is based on. Details for this exam will be in the Assignments in Canvas after Exam 1 is completed.
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> **Exam 3**: Data collection and analysis project. For this exam you will have the opportunity to design your own study, which will include data collection and analysis. Details for the exam will be in the Assignments in Canvas after Exam 2 is completed.
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> **Final Exam**: Tuesday May 9, 2017 8:30-10:30. The final will ONLY be given at this time. Final Exam questions are available in the Files section in Canvas.

Grading: Your overall grade will be waited as follows:

Homework	15%
Quizzes	10%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	30%

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

Time: Like all math classes, this class will require a great deal of your time. Make sure that you stay organized, make a schedule, and stick to the deadlines.

Classroom Conduct: It is imperative that the instructor and each student are treated with respect. Students should feel free to ask questions without being ridiculed. Respect each other!

Faculty Initiated Drop:
1. Students missing the first day of class, Jan. 17 WILL be dropped.
2. Students displaying poor attendance/performance during the first two weeks of the term MAY be dropped on Jan. 30. If your intention is to drop you should do so – do not expect me to do it for you.