Syllabus for Math 15: Intermediate Statistics	
Semester & Year:	Fall 2015
Course ID and Section Number:	MATH-15-E7991 (037991) Elementary Statistics MATH-15-E7993 (037993) Elementary Statistics
Number of Credits/Units:	4
Day/Time: **Location:**	Tuesday, Thursday, Friday 10:05-11:20pm SC208 Tuesday, Thursday, Friday 11:40-12:55pm SC208
Instructor's Name:	Levi Gill
Contact Information:	**Office location and hours**: *By Appointment* **Math Lab** Mon 10:30-12:00 Wed 9:30-11:00 **Academic Support Center (ASC)** *ASC is one-on-one tutoring for 1/2 and 1 hour appointments. Appointments can be booked up to one week in advance (first come, first serve).* *Call 707-476-4106 to make an appointment.* Mon 9:00-10:30, 12:00-1:00 Tue 9:00-10:00 Wed 10:30-1:00 Thur 9:00-10:00 Fri 9:00-10:00 **Email**: levi-gill@redwoods.edu

Course Description (catalog description as described in course outline):
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 frequency distributions, graphs, measures of relative standing, measures of central tendency, measures of variability, correlation, and linear regression to explore descriptive statistics. Students will use the laws of probability and statistical tests (t-tests, chi-square, ANOVA, and regression analysis) to make decisions via hypothesis testing and estimate parameters using confidence intervals.

Student Learning Outcomes (as described in course outline):

- 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.

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.

Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day:

A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.
The student code of conduct is available on the College of the Redwoods website at: http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf

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.

TEXTBOOK: *Interactive Statistics*, 3rd ed., Martha Aliaga & Brenda Gunderson.
ISBN: 0-13-149756-1. Be aware that there is a "Redwoods Edition" of that is not an acceptable substitute for the current course textbook.

CALCULATOR: You are required to have a graphing calculator for this course. I recommend a TI-83 or TI-84. I will be using a TI-83 in class. The Math Department has rental calculators for $20, but there are only a limited number available.

GRADING

Homework:	40%
Exams:	30%
Final Project:	15%
Quizzes/Written Assignments:	15%

HOMEWORK: Your homework should be neat, organized, and timely. Graphs are to be drawn on graph paper. Do not use pen. Students are encouraged to work together on the homework, but make sure that the work you submit is your own.

Your homework will be graded out of ten points as follows:

1 point for neat and organized work
2 points for submission on the due date
7 points for correct work

Homework will be due two class periods after the day assigned. This is to give you time to get help if you get stuck, but it is highly encouraged that you have the homework mostly completed by the time of the next class.

QUIZZES: There will be weekly online quizzes that will address the conceptual ideas from the reading and lectures. These quizzes will be posted on Canvas each Friday and due the following Monday.

EXAMS: There will be one midterm and a final exam. Exams are held during the class hours and regardless of the time you begin the exam, the deadline is at the end of the scheduled class time. If you are using the test proctoring services located in DSPS, be advised that you must schedule a time on the day of the exam. If you fail to attend the exam time that you have scheduled, then you forfeit your opportunity to take the exam. No make-up exams will be offered.

REFERENCE NOTEBOOK: Statistics is notorious for its various formulas that can only be applied when specific requirements are met. During the semester, you will create your own personal Statistics Reference Book. In your Reference Book, you will write definitions, examples, and instructions of things that you learn in this course.

This is notebook is not intended for taking notes during lecture, but for synthesis after you have read the material and have started doing the homework. It isn't until then that you will really know what is

important to write down.

You will be allowed to use your Reference Book on all Quizzes, the Midterm, and the Final Exam. As this is the case, I will not be providing any of the formulas on the quizzes or tests.

WRITTEN ASSIGNMENTS: At a few points in the semester I will provide articles in order for you to assess the integrity of the statistics claims based on what we have learned in class. After reading and thinking about the article, you will be asked to interact with the article through Canvas. Please be aware that even though the submission is being done online, a thoughtful and articulate response is still expected.

FINAL PROJECT: During the last few weeks of class, I will be providing you with data from a field study and will ask you to apply the modeling methods that we learned in class to interpret that data. Your results will be submitted in a four to seven page paper (double spaced) - the details of this report will be specified when the time comes. The paper and its drafts will be submitted through Canvas.

CLASS RULES: 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. If you must miss a day, please check with a classmate to see what you missed. You are responsible for the class material. Please do not use your cell phones or laptops during class as it distracts both you and others.

ASSISTANCE: If you have a documented disability or believe you can benefit from any of the services offered by Disabled Student Programs & Services (DSP&S), please contact the DSP&S office 476-4280.

Due to the unpredictability of life, course flexibility may be required. I reserve the right to make appropriate changes at any moment. These changes will be announced in class. If you are absent, it is your responsibility to check with other students in the class for the updates.