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| Syllabus for: (name of class) Elementary Statistics | |
| Semester & Year: | Spring 2015 |
| Course ID and Section Number: | Math-15-E7012 |
| Number of Credits/Units: | 4 |
| Day/Time: | TTHF 8:30am-9:45am |
| Location: | SC 208 |
| Instructor's Name: | Garrett "Todd" Olsen |
| Contact Information: | Office location and hours: CA 128/TBA Phone: 707-476-4229 Email: Todd-Olsen@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) : <ol style="list-style-type: none"> 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. | |
| 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. | |

Elementary Statistics

Math 15

Spring, 2015

Instructor: Garrett "Todd" Olsen
Office Hours: Email me for an appointment
Office: CA128 **Phone:** 476-4229 **Email:** Todd-Olsen@redwoods.edu
Course Webpage: <http://msemac.redwoods.edu/~tolsen/math15.html>

Prerequisite: Math 120 (with a C or better) or an appropriate score on the assessment exam. Prerequisites ensure that students entering this class have adequate background to effectively learn the material in the class and that they have a reasonable chance of success.

Textbook: *Interactive Statistics*, 3rd ed., Martha Aliaga and Brenda Gunderson.

Recommended Reading: *The Lady Tasting Tea*, Salsburg, David.

Course Goals: (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) Demonstrate the characteristics of an effective learner and critical thinker, such as note-taking, critical reading, communication through writing, verbal discussions, the ability to work as part of a group, etc. (5) Read and interpret information that contains statistical analysis and be able to communicate these results. (6) Judge the validity of research reported in the mass media and peer reviewed journals.

Calculators: You are required to have a calculator with a statistical package. Currently the Texas Instruments TI-83/84 is the best statistical calculator available and the one you must have for this course.

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| Grading: | Homework | 15% |
| | Quizzes/Activities | 30% |
| | Essay Exams (2 @ 20% each) | 40% |
| | Final Exam | 15% |
| | Total | 100% |

Homework: Homework is absolutely essential to the learning of Statistics. One cannot learn Statistics without doing Statistics. Regular homework will be assigned each week and is due the first class meeting the following week. Your homework will be evaluated on accuracy, completeness and neatness.

Homework Format: The following format must be followed in order to receive credit for your homework assignments:

1. Make sure that the sections and individual problems are in sequence.
2. Fold the homework in half lengthwise (the long way).
3. Write your name, the assignment number, and days and times the class meets on the front of the folded assignment (assume it should open like a book).

Quizzes: Quizzes will be given at the beginning of class on Thursday each week, and if you are late or miss class, you miss the quiz. The content for these quizzes will include material covered in class and in the textbook.

Essay Exams: You will be assigned two take-home exams during the semester. You are encouraged to work together on these projects, and you are required to share your ideas and critique each other's work. Each of these projects will follow a schedule of drafts culminating with a final report. Your grade for each of these projects is based on the quality of your participation in this process as well as the quality of your final report.

Final Exam: The final exam for this course will be cumulative and consist of short essay questions. The final exam will be given only during the scheduled time. Please make your vacation plans with this in mind. If you need to be absent from the final for a reason that is not serious and compelling, you must drop the course before the deadline, or file a petition to waive college regulations (see me about this).

Disclaimer: I have conscientiously outlined the plans and policies for the semester in this syllabus. However unforeseen events and circumstances may deem necessary changes to any part of this document. I therefore reserve the right to make any changes to this syllabus determined to be necessary by me at any time during the semester.