Syllabus for: (name of class) ELEMENTARY STATISTICS		
Semester & Year:	Fall 2012	
Course ID and Section	Math 15	
Number:	E1897	
Number of Credits/Units:	4	
Day/Time:	Mon Wed Fri 1:15-2:30	
Location:	PS 110	
Instructor's Name:	The` The` Kyaw	
Contact Information:	Office location and hours: PS 200, Mon Wed 12-1pm or	
	By appointment	
	Phone: (707) 476 4100 ext 3051	
	Email: t-kyaw@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, chisquare, ANOVA, and regression analysis) to make decisions via hypothesis testing and estimate parameters using confidence interval.

Prerequisite: Math-120 Intermediate Algebra with a grade of "C" or better, or satisfactory performance on the math assessment exam

#### **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 base 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.

**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: <a href="http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf">http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf</a>

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 Elementary Statistics College of the Redwoods:Fall 2012

**Instructor**: Thè Thè Kyaw (you can also call me Tina) Classroom: PS 110

Office Location: PS 200 Class time: MWF 1:15-2:30 pm

Office hours: MW 12:00-1pm & by appointment

**Phone**: (707) 476 4100 ext 3051 **Email**: t-kyaw@redwoods.edu

Website: http://msemac.redwoods.edu/~tkyaw

Note: Call only during office hours and please do not leave any messages on the answering machine. The best way

to reach me is via email.

## **Course Description**

<u>Catalog Description</u>: 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 interval.

Prerequisite: Math-120 Intermediate Algebra with a grade of "C" or better, or satisfactory performance on the math assessment exam

### **Course Outcomes**

Upon successful completion of this course, the student will be able to:

- 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 base 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.

# **Required Text and Materials**

- Interactive Statistics, 3<sup>rd</sup> ed., Martha Aliaga & Brenda Gunderson. ISBN: 0-13-149756-1
- A TI-83 or TI-83 Plus or TI-84 graphing calculator
- Graph paper, pencils, a red pen, an eraser, a ruler or a straightedge, a staple with staples, standard-sized paper (8.5 in by 11 in)

#### Homework

Homework will be assigned every class meeting, and is due every Monday at the beginning of class. **Late homework will not be accepted!!** However, four lowest homework scores will be dropped. If you are absent, you may do one of the following before the time the assignment is due:

- Send the homework to another classmate to turn in.
- Scan your homework and send it to me via Email as PDF attachment.

You can also drop off your homework papers in my mailbox by putting it into the slot in the wall next to room PS 101. Make sure you label your homework with your name and my name.

If you can't get the assignment in on time make sure that you know the material because you will still be held responsible for the information.

Turn in your homework papers in a neat and orderly fashion. All assignments must be printed with your name, course, assignment number and date in upper right corner and all your papers must be **stapled** in upper left corner. The homework must be done in pencil and you do so legibly and neatly. Show all work or explanation for full credit. **Follow the homework guidelines that shown on the last page of this syllabus.** Failure to do so will result in no credit. Homework grades are based on correctness, completeness, and presentation.

Extra help is available at the math lab or during office hours or by appointment.

Statistics is learned by **doing** problems, which means, <u>doing homework</u>. You should set aside at least 2 hours per day, 3-4 days per week for homework. Some students may need more than 2 hours per day. That may sound like a lot, but those who work diligently and thoughtfully will be rewarded with a good understanding of course content, not to mention a good grade on your college transcript.

#### Math 52-The Math Lab Course for Statistics

All students are strongly encouraged to sign up for Math Lab. You can receive help on your homework questions, or work on computer tutorials. Math Lab is located in the Academic Support Center (ASC) in the back part of the Library and it will be open M-Th 9:30-5 and F 9:30-3. You can register in the ½- unit section or the 1-unit section. For the ½- unit section, students need a total of 22.5 hours of attendance before Dec 7<sup>th</sup> to get credit. That means an average of 2.25 hours each and every week (about 35 min per day, if you go 4 times per week). For the 1-unit section, students need a total of 45 hours before Dec 7<sup>th</sup>.

# **Projects**

There will be at least two projects that involve collecting and analyzing your own sets of data, and turning in written assignments, and/or reading from several different sources (including journal articles) and submit papers.

#### Quizzes and Exams

- There will be a 15-20 min quiz every Friday and you are not allowed to use any notes or text books. The quiz is worth 10 points. Absence result in "0" point for the quiz, however I will drop two lowest quizzes at the end of the semester.
- There will be two midterm exams and a final exam throughout the semester. **No MAKE-UP tests** will be given unless you notify me in advance. You are allowed to use a 3by5 inch note card on exams.
- The final examination will be comprehensive and mandatory will be given at the officially scheduled time only. There is **no MAKE UP!** The tests and the final exam will be closed book. You are required to take the final exam to pass this class.

Final Exam Date and Time: Dec 12<sup>th</sup> (Wednesday) 1-3pm

## Grading

You grade will be calculated according to the following percentages:

Homework	25%
Quizzes	10%
Projects	15%
Exam I	15%
Exam II	15%
Final Exam	20%

Overall Grade	Percent
A- or A	90-100%
B-, B or B+	80-89.99%
C-, C or C+	70-79.99%
D	60-69.99%
F	Below 60%

The final grade is at the professional discretion of the instructor.

#### **DSPS Services**

At College of the Redwoods, students who have professionally verified disabilities are eligible to receive educational support services and courses as defined in Title V of the California Education Code. Students desiring accommodations and/or services must request them from the DSP&S Specialist, in a timely manner. If you are a student with disability, please notify me as soon as possible. First, make sure that you obtain all the required documentations from DSPS office. For more information, please contact DSPS office at (707) 476-4280.

#### **Attendance and Class Policies**

One of the most important things that you can do to succeed in this course is to attend every class meeting. It is the policy of the math department to drop students for excessive absences. This means that if you miss more than five class meetings you may be dropped from the course.

I expect that everyone is treated with respect in our class. Anyone displaying inappropriate language and/or attitude in class will be dropped from the class. Sleeping, reading newspapers, or studying for other classes during class time will not be tolerated. Disruptive behavior will not be tolerated in class and could result in you being dropped from the class. You are expected to arrive on time and to leave when the class is dismissed. Arriving late or leaving the class before dismissed is disruptive to your fellow students and extremely disrespectful to your teacher.

Cell phone use in class is prohibited. If you are expecting an emergency call, please set your phone on silent/vibrate mode. Do not send, write, read, or retrieve any text messages during class time. If you need to use your phone, please do so outside of class.

If you are absent, it is your responsibility to check with a classmate to find out what you missed, so you need to get to know a few classmates. "But I was absent that day" is <u>not</u> a valid excuse.

Any kind of cheating will not be tolerated. If you are caught cheating, or plagiarizing or otherwise engaging in academic dishonesty, you will receive a grade of 'F' in the course. In addition, cheating will be reported to the Vice President, Chief Student Services Officer.

NOTE: The syllabus is subject to change by me, at any moment.