Syllabus for Introduction to Statistics – Eureka Campus				
Semester & Year	Fall 2017			
Course ID and Section	MATH 15 - E3	137		
#				
Instructor's Name	Kimberly D. Per	terson		
Day/Time	Monday, Wedne	esday, Friday 2:50 pm – 4:05 pm		
Location	SC 202			
Number of	4.0			
Credits/Units				
	Office location	TBA		
Contact Information	Office hours	TBA		
	Phone number	NONE		
	Email address	kimberly-peterson@redwoods.edu		
	Title & Edition	Interactive Statistics, 3rd ed., (Be aware that there is		
Textbook Information		a "Redwoods Edition" of that is not an acceptable		
		substitute for the current course textbook.)		
	Author	Martha Aliaga & Brenda 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 <u>Disabled Students Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

# Academic Support

Academic support is available at <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended</u> <u>Opportunity Programs & Services</u>, 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: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u>, and scroll to AP 5500. 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: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u> and scroll to AP 5500.

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# **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: (<u>http://www.redwoods.edu/aboutcr/Eureka-Map</u>; choose the evacuation map option). For more information on Public Safety, go to <u>http://www.redwoods.edu/publicsafety</u>. 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 <u>https://www.GetRave.com/login/Redwoods</u> 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 <u>security@redwoods.edu</u> 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 Section E3137– Introduction to Statistics

SCSC 202 Synonym 043137 MWF 2:50 pm – 4:05 pm 4 units

# Instructor

Kimberly Peterson, Lecturer - Mathematics Department *Phone*: n/aemail: <u>kimberly-peterson@redwoods.edu</u> *Office*: TBA *Office hours: TBA* 

# **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. [*Prerequisites: Math 120, or Math 194, or Math 102*]

#### **Classroom Environment and Attendance**

It is essential to our class that both the students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful of one another. You should not hesitate to ask questions nor feel embarrassed to ask for help.

**Please be on time and prepared with your headphones put away and cell phones turned off.** You are expected to arrive on time and to leave when the class is dismissed. Arriving late or leaving before class is dismissed is disruptive and disrespectful to your fellow students as well as your teacher. If you must miss a day, please check with a classmate to see what you missed.

#### Grades

93-100%	.A
90-92%	.A-

Homework	<b>25%</b> 87-89%	B+
Quizzes	<b></b>	B
Exam 1	11.6%	

Midterm ......B-Exam 3......B-Final Exam......25%

77-79%.....C+ 73-76%.....C 70-72%.....C-0-69%.....NOT PASSING

\*\*\* Final grade is at the professional discretion of the instructor \*\*\*

#### Materials

#### **Required:**

**Textbook:** The Mathematics Department continues to be concerned with the rising prices of textbooks. Students in Math 15 have a couple of options for obtaining a textbook:

- The CR Bookstore sells copies.
- You can also purchase the textbook online.
- You can purchase the textbook from a local bookseller (Tin Can Mailman has several copies).

ISBN Information: Interactive Statistics (Third Edition), by Aliaga and Gunderson, published by Prentice Hall ISBN 0131497561 (Be aware that there is a "Redwoods Edition" of that is not an acceptable substitute for the current course textbook.)

**Reading the Textbook:** It is important that you read and work the examples in the textbook before attemping the exercises. Many students will work the process in reverse. That is, they begin working the exercises, then if stuck, they page back through the narrative in the text seeking a similar example to the exercise on which they are working. This is not a recommended approach to the study of mathematics.

**Calculators:** 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. (**Absolutely no cell phones**)

#### Homework

Homework sets will be due every Friday at the beginning of class. **No late work is accepted** (if you can't attend class, have a friend to turn it in for you). All HW should be neat and well organized. Use pencil and eraser (**No Pen**), a ruler, and staple multiple sheets. Messy papers will be returned ungraded. Poorly organized papers or hard-to-follow problems will receive little or no credit (**See "Homework Guidelines" Handout for more details**). Our course may have a grader who will grade selected problems from each set, and also give credit for completeness.

The assignments may take a great deal of time so I recommend you start working on them as soon after class as possible, this way you will have plenty of time to ask for help. I recommend setting aside at least 1 hour/day, 5 days a week to complete an assignment. Set yourself up to succeed; do a little bit at a time. Remember, homework is a worthwhile investment because it is where a great deal of your learning for this course will take place.

#### Quizzes

There will be weekly online quizzes that will address the conceptual ideas from the reading and lectures. These quizzes will be posted on Optimath each Friday and due the following Monday before the start of class.

### **Exams and the Final**

There will be three mid-terms and one comprehensive final exam. These exams will be closed book. I will provide time for in class review prior to the exams. However it is your responsibility to come prepared to these review sessions with questions or topics to discuss. Notice the dates associated with these exams early in the semester and plan any travel/appointments accordingly. No makeup exams will be given.

# Final Exam: Monday, December 11th, 2017 3:15 pm – 5:15 pm SCSC 202

#### Assistance

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.

# **Final words**

A few words about my expectations for you and myself in this course: my responsibilities include coming to class prepared to teach you statistics, giving clear lectures, assigning carefully chosen homework problems that are relevant to our course and carefully preparing exam questions that accurately measure your progress in the course.

Likewise, I believe that you are ultimately responsible for your university education and I expect you to come to class motivated to learn the material. This involves keeping up with homework assignments and reading the text. Get an early start before it is too late.

Announcements will be made in class. If you are absent, it is your responsibility to check with your fellow classmates!

# How to Succeed in this Course

• **Read your text**. It is best if you read the section of the text <u>ahead</u> of the scheduled lecture date on that topic.

• Be in class on time every day.

• **Do your homework!** Plan to spend 2-3 hours outside of class for every hour inside of class. That is the minimum investment of time for success in this course.

• Work with colleagues. Mathematics is a social subject (but not a spectator sport). Working with fellow students helps in your own understanding of the ideas of the course (as you explain and/or hear others explain key concepts and procedures).

• Read and keep your returned work. When you get work back, look for any remarks that I or the grader have made. Keep your work

in your binder/folder to keep a record of your scores. This is to make sure I correctly enter your grades.

# Guidelines for Writing Homework

Please adhere to the following guidelines before turning in your homework assignments:

1. **Staple** all homework in the upper left hand corner. I will NOT bring a stapler.

2. Label your homework with your name, course number and HW number in the upper right hand corner

Example: (The top of your paper should look somewhat similar to this)

3. Write your problems **in order down** the page. You may use both sides of the paper.

4. **Circle** or **box** your answers to each exercise when appropriate.

5. If you are completing homework on paper torn from a spiral bound notebook, tear/cut any frilly edges.

6. Use **pencil** when writing your homework, and write legibly and neatly. Presentation is a component of your homework score.

7. Be sure to **show your work** when solving a problem. Any problem with just the answer and no work shown will not receive any points.

- 8. When creating a graph, you must use graph paper and a ruler or straight edge.
- 9. Use complete sentences when answering any word problems or application

problems. This should include proper spelling, grammar, punctuation and units.