Syllabus for: (name of class)
Math 15

Semester & Year:	Fall 2014
Course ID and Section Number:	E6115
Number of Credits/Units:	4
Day/Time:	TThF, 11:40-12:55 pm
Location:	SC 208
Instructor's Name:	David Arnold
Contact Information:	Office location and hours: SC 216H, TTH, 1-2:00 pm, F, 2:30-3:30 pm, CCCConfer, STTh, 9-10pm Phone: 476-4222 Email: david-arnold@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) :

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://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.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 homepage.

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.

David Arnold

Mathematics

- Department Home Page
- myCR
- WebAdvisor
- Optimath
- David Arnold Home

Math 15: Instructor's Syllabus

The Adobe Reader

To use the textbook and Optimath system in this course, you must have properly installed and configured the Adobe Reader on your computer. You will need to download a free copy of the Acrobat Reader to read them. Click the following icon to obtain a free copy of the Acrobat Reader.

It is important that you have the most current version of the Acrobat Reader that your system will allow. The above links will take you to the Adobe site. The Adobe site will analyze your system, but you may be asked to choose the appropriate version of the reader for your system. If this happens, carefully select the appropriate version of the reader for your system.

Official Course Outline

The official course outline for Statistics, including content, objectives, and student learning outcomes, can be viewed online via the following link. Please take some time to read the

Math 15 Course Outline

You'll find the following course learning outcomes on the course outline:

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.

Prerequisite Classes

Math 120 or Math 194 (or equivalent) with a grade of "C" or better or appropriate score on the math placement exam. In lieu of this prerequisite, students can take an assessment test in the Academic Support Center (the ASC is in the library) to insure proper placement in the course. Students are advised to see a counselor as they can be quite helpful in placing students in a course commensurate with their ability and background in mathematics.

Instructor's Schedule

The following link contains a copy of my schedule, including office hours.

Schedule and Office Hours

Note: These are "official" office hours. However, I will make myself available whenever I can. Please do not be afraid to ask for help at any time as I am always eager to help.

Office Location and Phone

- Science building SC 216H
- Office phone: (707) 476-4222

Cancelled Classes

Those driving long distances to attend classes are advised to call (707) 476-4210 before driving to the CR campus. Choose #5 from a menu of choices. You will then be advised of any cancelled classes for the day in the Physical Sciences complex (math/science). Thus, you can avoid the frustration of driving to campus, only to find that your class has been cancelled.

Email

My email address is: David-Arnold@redwoods.edu

myCR

Click the myCR icon that follows. This will initiate contact with myCR. Click the Account tool, then the Modify Details button. Change your password. Be sure to write down your login name and password for future reference. Once you complete your password entry, click Update Details to complete the process

Next, click the Profile tool and enter any information you wish to share. Don't enter things like phone numbers that you wish to keep private. Click the Save button when you are finished.

If you wish email messages to be forwarded to an email address other than your MyCR email address, click the Messages tool, then the Settings tab. Select "Yes" to Autoforward Messages, then fill in the email address where you want email messages forwarded. Click Save Settings when finished.

Once you login to myCR, locate your math class and take some time to find out what is provided. Then read the "Welcome Message" in the Discussion Board and reply to to the "Welcome Message" thread. In the future, use the Discussion Board to discuss issues and problems you are having with your class.

Getting Help

Help is available in many forms.

- Your instructor is always available for help in SC 216H when he isn't teaching class or attending a meeting. Take advantage.
- The Academic Support Center (ASC) in the library provides individual and group tutoring. You need to check in at the ASC desk and make an appointment to meet with a tutor.
- Guidance 205 (GUID 205) is a non credit course which can be taken for free. This qualifies you to get help in the Mathlab. If you simply go to the Mathlab (in the ASC -- CR Library) and tell the instructor who is working when you get there that you would like to enroll in GUID 205, you will be given a form to fill out. No need to do anything else.
- The "Mathlab" resides along the windows in the ASC. You must first go to registration (Forum Building) and register for Math 52 to make use of the mathlab. You can either register for 1/2 unit or a full unit. You can also register via Webadvisor.
    1. If you register for 1/2 unit, you must complete 22.5 hours in the mathlab. This amounts on average to 1.5 hours per week.
    2. If you register for 1 unit, you must complete 45 hours in the mathlab. This amounts on average to 3 hours per week.

  After you complete the registration process, proceed to the Mathlab which is located in the Academic Support Center (ASC) of the Learning Resource Center (LRC). There will be an instructor there who will give you an information page, and a contract to sign.

  If you have already taken Math 52, and passed the corresponding course while you took Math 52, you cannot take it again. In this case, use GUID 205 (described above).

  Comprehensive information on the Mathlab is available at the following link:

  Information on the MathLab

  You can find a list of instructors who work in the Mathlab and a schedule for the hours that Mathlab is open at the following links:

  Mathlab Instructor Schedule and Hours

  The mathlab is not the place to get personal, extensive, one-on-one tutoring (you should make an appointment with an ASC tutor for that), but it is a great place to work on your homework and get quick help when you are stuck. People work on their homework, then raise their hand when stuck, and tutors come by as soon as they are available. Tutors are trained to jump around from student to student, hopefully not taking too much time with each question, so it's likely that you can get quick attention as you need it.

Classroom Environment

It is expected that everyone involved in this class, teacher and students alike, will act in a manner conducive to providing a comfortable environment for learning, a classroom where students feel free to ask and answer questions without fear of embarrassment or ridicule.

It is important to stay on task when class is in session. Hence, conversation not pertaining to the subject at hand should be taken outside the classroom.

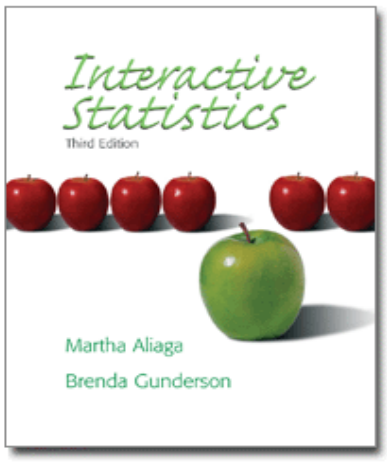
I understand that students will have to get up and leave the room for various reasons and I also understand that students will arrive late from time to time. However, courtesy requires that you enter and leave as quietly as possible, without disturbing discussion or lecture.

It is essential for student success to maintain a good environment in the classroom. If you have any personal difficulties with the learning envrionment in the classroom, please visit me in my office to discuss them.

Textbooks

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. ISBN Information:
    - Interactive Statistics (Third Edition), by Aliaga and Gunderson, published by Prentice Hall (ISBN 0131497561)



    - Online purchase recommendations:
        - Online searches for the 3rd edition. Important: When doing online searches for the text, search by the ISBN 0131497561.
            - A search of Amazon.com revealed these prices and availability.
            - A search of campusbooks.com found these prices and availablity.
            - A search of BookFinder.com revealed these prices and availability.
            - A search of half.com revealed these prices and availability.

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.

R and RStudio

- We will be using R in this course to help produce graphics and perform statistical analysis. R is a free software package that is used extensively by statistics people throughout the world. You can view the R site online at http://www.r-project.org/.
- You can watch a movie on Installing R.
- You can watch a movie on Installing RStudio.
- After you have installed R and RStudio, watch the movie Data Types and Basic Operation. This will give you a nice introduction to the types of data that R uses. As you watch, pause the movie and type in the expressions in the RStudio console and learn what happens.
- Although we've installed both R and RStudio, it is RStudio that we will be using throughout the semester. RStudio is a user interface that makes the use of R much easier to handle. However, in order for RStudio to work, R must be installed first.
- If you have trouble getting these movies to play on your computer, try installing the QuickTime Player

Examinations

We will have one midterm examinations and a comprehensive final examination. Students should sit for all examinations on the day that they are administered. If you miss an examination, there is no guarantee that you will be allowed to make up the examination. Indeed, makeup examinations are given only at the instructor's discretion. If you know ahead of time that you have a conflict that will prevent you from sitting for an examination, please meet with me to discuss alternatives.

Students who need special arrangements for examinations are expected to meet with the instructor before **each** examination to insure that all examination materials are on file in the Academic Support Center (the ASC is in the Learning Resource Center (library)).

Every student will be required to sit for a final, cumulative examination. The time and day of this examination is posted in the Schedule of Classes and students are expected to sit for the exam at the time and on the day posted. No exceptions. Any student failing to sit for the final examination will receive an F in the class. Please keep this in mind when making travel plans for the end of the semester. Plan ahead!

Quizzes

We will have frequent quizzes throughout the semester. Some you will work on at home, others will be administered during class.

Homework

Homework will be assigned daily and will be due the next class meeting. Each homework will be assigned a grade ranging from 0-10 points, bases on completeness, the following of directions, and the quality of work.

It is essential that students keep up with the homework on a daily basis. Each time you come to class without your homework, you are not prepared to take part in the class at a level geared to your success. Therefore, students are encouraged to hand in homework on time. However, I am acutely aware of the

responsibilities that many students have to deal with outside the classroom. Consequently, I do allow a "grace period" of one class period for late work. That is, if you hand your homework in by the next class period, I will still accept the assignment. However, there is an automatic 2-point deduction for late work. Homework later than one class period will not be accepted.

If you are experiencing difficulty getting your homework in on time, or if you know an upcoming event will interfere with getting your homework in on time, please discuss this with your instructor. We can possibly make some arrangment to help facilitate the completion of your work.

In order to facilitate the recording of homework scores, students are required to place their name in the upper right-hand corner of their homework assignment and staple the pages together with a single staple in the upper left-hand corner. On the first line of the of the first page of your homework, please write down the assignment number, the pages that encompass the assignement, and list each exercise number assigned. For example, the first line of your homework might read:

Assignment #12, Page 150, #1, 3, 5, 7, 8, 10, 11, 23, 45

Attendance Policy

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.

Attendance will be recorded each class session. If you know you will be missing class, you should let your instructor know.

Grades

Your homework, quizzes, and examinations will be weighted and averaged to determine your final grade in the class. A running account of your work can always be viewed in your gradebook.

When Problems Arise

Should problems arise during the semester, always contact your instructor to let me know what's going on. That's the only way I can help.

The Syllabus is Subject to Change

As your instructor, I reserve the right to make adjustments to the syllabus should things not proceed as smoothly as expected. However, in general, I do not anticipate making changes.