

Instructor: Ann Kalinowski, Ph.D.

Email: ann.kalinowski@berkeley.edu

Office: 449 Evans Hall

Weekly course schedule:

Lectures meet Monday through Friday from 1-2 PM 2 LeConte. Note that Berkeley actual lecture start times are 10 minutes AFTER the stated start time to allow time to travel between classes.

Sections meet Monday through Thursday (for 50 mins each) starting on Monday 6/22/2015. There are 3 sections.

101 2:00-3:00PM Hildebrand 51 (Andrew Do) 103 2:00-3:00PM Hildebrand 56 (Lindsey Lee)
102 3:00-4:00PM Dwinelle 156 (Andrew Do)

The GSIs will help you work on practice problems in section, and further explain concepts from lecture. Attendance is not mandatory, but strongly encouraged. Because of this, **5 percentage points of your final grade will be based on your participation in your section, which will include both attendance and willingness to answer questions and work in groups on problems.**

Please note: You MUST attend the section for which you are officially registered. If you officially change sections after homework and/or quizzes are returned, YOU are responsible for making sure your new GSI has your earlier grades. It is NOT either GSI's responsibility to try to find you or your grades if you make changes.

Text: *Statistics* (4th edition) by Freedman, Pisani, and Purves.

Instructor office hours: T/F 11:30AM-12:30PM, MWTh 2-3PM

GSI office hours: These will be posted on Bcourses as soon as they are available.

You should bring your own calculator to class and to sections, especially for tests and exams. No calculators will be provided for you if you forgot your calculator, you have the wrong type, or your battery runs dead.

For exams and quizzes, you must have a basic 4-function and square root calculator (M+, M-, % keys ok). Any advanced calculators or cell phone calculators will be confiscated if you are found using them during a test, and you will receive a 0 for the test. You may use whatever calculator you want for homework or in class, but only a basic calculator for tests.

Homework: homework will be assigned approximately weekly, assigned on Wednesdays. It will cover the week's lectures from Monday through Friday. Homework will be collected IN SECTION on Wednesdays AT THE BEGINNING OF SECTION. Your homework is due on-time in sections. NO late homework will be accepted. Slipping homework under either my or the GSIs' office doors does not count as being turned in on time, nor does turning the homework in at the statistics office. If you know you will be out of town and want to hand in the assignment early, make arrangements with your GSI. The lowest homework scores will be dropped. Homework is worth 6% of your total grade.

Quizzes: quizzes will be given in section 4 times during the session. Each will be 30 minutes long. The quizzes will be worth 9% of your total grade. **NO MAKE-UP QUIZZES WILL BE GIVEN FOR ANY REASON.** Your lowest quiz score will be dropped in the computation of your overall quiz score.

Please note: The drop policy is intended to allow for circumstances such as your being sick, needing to be out of town, etc., etc. without your being penalized for those absences or illnesses, so DO NOT ask to turn homework in late or to have a make-up quiz because you were ill or out of town. Those requests will NOT be fulfilled.

Exams:

Midterm: There will be 1 in-class midterm on Friday, March 19, in class. It will test you on material covered in Chapter 1 through 17 (except 6, 7) This will account for 30% of your final grade.

Final: There will be one final exam covering all the material in the course on the last day of class: Friday, August. It will be two hours long, one of which will be during regularly scheduled lecture time. *You must take the final exam to get a passing grade.* If you cannot take the final or midterm at the dates and times given below, you should not take this class. *The final exam will account for 50% of your final grade.*

GRADES: Overall course scores will be computed as follows:

Homework (Best 6 of 7)	6%
Quizzes (Best 3 out of 4)	9%
Midterm	30 %
Final	50 %

Your GSI has control over an additional	5%
Determined by participation in section	

No individual letter grades will be given for homework, quizzes, midterm or final. Your letter grade for the course will be entirely based on your overall course score.

90% - 92% A-	93%-100% A	
80% - 82% B-	83% - 86% B	87% - 89% B+
40% - 49% C-	50% - 69% C	70% - 79% C+
Below 40% - F		

The philosophy behind Stat 2 and its textbook is to emphasize statistical concepts over ‘plug-and-chug’ use of formulas. Hence there are very few formulas, and those we do have are mostly expressed as words to emphasize their conceptual nature. There will be some calculations, but they will tend NOT be lengthy and will never involve more than high school algebra. The tests will be designed so that there are enough easy problems for everyone who tries to pass, but enough conceptually difficult ones so that an A is not guaranteed unless you can use the concepts in situations you haven’t been exposed to previously.

Comments: Please skim the relevant material in the text before the lecture, especially the chapter summaries. You do not need to know the material fully, just have an idea of what I will be discussing. After the lecture read both your lecture notes and the text. Try to understand the *ideas and concepts*. Avoid rote learning! Eschew plug-and-chug. The point of this course is to learn the method and principles behind the methods. We will continually be asking WHY you are doing what you doing.

DO AS MANY PROBLEMS AS YOU CAN IF YOU WANT TO GET A GOOD GRADE. The answers to end-of-section problems in the text are in the back of the book, so you can check yourself. Review questions are harder, and are NOT in the back of the text. Your GSI will likely be going over several of these in section. When difficulties arise see your GSI or me in office hours. Form study groups. Do you have a favourite sports team? What do they do to succeed? They PRACTICE for HOURS and HOURS. The practice is often B-O-R-I-NG. Who likes doing lots of mindless reps in the gym, dozens of jumping jacks, exercising your brain rather than your muscles. Notice that the ‘problems’ are called ‘exercises.’ Same idea as in sports, but different ‘muscles’ are being exercised.

Please make a point to attend lectures and your sections. The energy around learning the material is higher when students engage with the material, and regularly ask and answer questions, in lecture, section, and in study groups.

Please note THE SCHEDULE BELOW IS SUBJECT TO REVISION AND CHANGE!! Changes will be announced in lecture. It is YOUR responsibility to make sure you are aware of them.

Tentative syllabus – subject to adjustment and change.

Week of	Topics	Chapters covered	Quizzes and exams()
22 June	Collecting data properly, histograms, means and SDs	1, 2, 3, 4	
29 June	Normal approximation for data, correlation, more about correlation, regression	5, 8, 9, 10	Quiz 1 (Thursday)
7-Apr	RMS error, the regression line, what are the chances, more about chance	11, 12, 13, 14	
14-Apr	Binomial formula, law of averages, expected value and standard error,	15, 16, 17	Quiz 2 (Thursday),
21-Apr	Normal approximation for probability histograms, sample surveys	18, 19	Midterm Chs 1- 15 (Friday in class)
28-Apr	Chance errors in Sampling/Accuracy of percentages	20, 21, 22,	Quiz 3 (Thursday)
5-May	<i>The accuracy of averages, Tests of significance, closer look at tests of significance</i>	23, 26, 29	
14-May	More tests for averages, chi-square tests, review, final	27, 28	Quiz 4 (Thursday), Final cumulative Chs 1- 29, excluding 27, 28 (Friday in class and another hour before or after to be determined)