

# Psychology 318: Analysis of Data, Spring, 2009

## Instructor

Geoffrey R. Loftus  
Guthrie Hall, Room 134  
Office Hours: By appointment

**Teaching Assistants (NOTE: All TA office hours in Gould Coffee Shop except when noted otherwise)**

### Graduate TA:

Zach Ernst: AC Fri 9:30 CHL 101  
Ofc Hrs: MW, 10:30-12:00  
email: zernst@u.washington.edu

### Undergraduate TAs:

Yu Ding: AA Fri 8:30 CHL 025  
Ofc Hrs: W 1:00-4:00  
email: dingy@u.washington.edu

Andy Klatt: AB Fri 8:30 PAR 112  
Ofc Hrs: W 11:30-1:30; F 11:30-12:20  
email: klatta@u.washington.edu

Tim Kelly: AD Fri 9:30 DEN 311  
Ofc Hrs: M 10:30-11:20; 9:30-11:20  
email: vnv00@u.washington.edu

Courtney Chase: AE Fri 9:30 BLM 211  
Ofc Hrs: MWF 10:30-11:30 in the CSE coffee shop  
email: chasen8@u.washington.edu

## Class information: Handouts and web postings

Information will generally be posted on the class web site. To get to the class web site, you can go to

<http://faculty.washington.edu/gloftus/>

and follow the link to "Psychology 317-318: Statistics." There you find day-to-day class information (e.g., reading assignments, homework assignments, relevant text material for exams, etc). You should bookmark this page and check it at least once daily.

## Lectures

MW 8:30 - 10:20 in EEB 105. Please arrive on time; lectures will begin promptly at 8:30. There will be a 10-minute break between 9:20 and 9:30.

## Readings

Readings will be from Loftus and Loftus, *Essence of Statistics*, Second Edition, published by McGraw-Hill. In general, readings will be assigned on the class web site on Wednesdays or Mondays. They will cover material for the upcoming week. In order to understand the material each week, it will be highly recommended that you complete the readings before the lectures to which they're relevant.

NOTE: Be sure to correct errors using the textbook errata sheet that you should have downloaded from the class web site.

## Handouts

You should download and print a handout packet. Every now and then, additional handouts may be provided. When they are, they will appear on a table at the front of the classroom and/or will be downloadable from the web site.

## Examinations

There will be five midterm exams during the quarter, plus the final exam. They will occur on Mondays. Each midterm exam will cover only the material since the previous midterm exam. However, the final exam will be cumulative—it will cover all the material in the course. Although you will have the full two-hour class period to do a midterm exam, the exams will be designed such that they should take considerably less than two hours. In other words, it is our hope that there will not be time pressure. Note, however, that the Final Exam, which will also take two hours, will be longer than the midterms.

**All exams will be open-book and open-note.** In addition, you should bring a pocket calculator or a laptop computer (which you should inspect the night before the exam to insure that it's in working order). Exams should be written in pencil, not pen.

All exams will be graded on a scale from 0-100. The grade for each question will be based on knowledge of method, on obtaining the correct answer, and on neatness and organization. Exams will be graded and handed back to be gone over during the quiz sections that occur during the week of the exam.

### Homework

There will be five homework assignments, one covering the material relevant to each of the five midterm exams. In all cases there will be an opportunity to go over the homework in quiz section before an exam. Homework will be due on the Thursday preceding an exam by **12:30 pm in Zach Ernst's mailbox (or hand it to your TA in person any time)**, and will be returned at Friday section. A homework answer sheet will be posted on the class web site on Thursday shortly after 12:30. Homework will be graded in a fairly superficial manner, as there will be an answer sheet for you to refer to.

You need not, of course, wait until the last minute to turn in your homework. It is perfectly ok and actually quite advisable, to hand in your homework to your TA early (for instance in class). Staple pages of your homework together. Homework due dates are unchangeable, immovable, and sacrosanct. If, God forbid, you should break your leg, get a friend to deliver your homework for you. **No excuses will be accepted for late homework, nor will late homework be graded.**

Homework can be done either singly, or in groups. Remember that the primary purpose of doing homework is to assist you in learning the material. Learning statistics without practicing is roughly as effective as learning tennis without practicing. You can skip homework or copy it from elsewhere, but you will pay dearly for this practice on your exams.

Homework will be graded on a scale from 0 to 5. A homework answer sheet will be provided at the same time. There will be a "final homework" covering lecture material from the last week of the quarter, which will be graded on a scale from 0 to 2.5.

### Quiz Sections

Quiz sections will be held on Fridays at 8:30 and 9:30. Note that we will assign you to a section, i.e., please ignore your "official" University of Washington assignment. Quiz sections will be used primarily to go over homework and exams. A schedule of quiz-section activities is included on the schedule of events (next page).

Please ignore the quiz section to which the University of Washington computer assigned you. We will provide our own assignments which will be posted on the web site.

### Course Grading

Each of the five midterm-exam grades (0-100) will be supplemented by its corresponding homework grade (0-5). Thus, supplemented exam grades can range from 0 to 105.

Prior to the final exam we will compute a *midterm score*. This will be done as follows. First, we drop the lowest of your five supplemented midterm-exam grades. We compute both the mean and median of the four remaining midterm-exam scores. Whichever of the two, mean or median, is higher is your *midterm score*. **WE HAVE ORGANIZED THIS SYSTEM TO ELIMINATE PROBLEMS ASSOCIATED WITH YOUR MISSING AN EXAM BECAUSE OF SICKNESS OR OTHER LEGITIMATE REASON. IF YOU MISS AN EXAM, YOU WILL RECEIVE A ZERO ON IT AND IT WILL BE THE ONE THAT GETS DROPPED (THUS YOU NEED NOT EVEN TELL US IF YOU MISS AN EXAM). There will be no makeup exams. There Will Be No Makeup Exams! THERE WILL BE NO MAKEUP EXAMS!!**

Please do not request a makeup exam.

Your final exam is graded on a scale from 0 - 100. To it is added your final homework score, which can range from 0 to 2.5. After the final, you will have two scores: your midterm score, computed as described in the previous paragraph, and your final exam score. These two scores will be combined to produce a final score with weightings of 3/4 and 1/4, with the 3/4 weighting going to whichever score is highest. So, for example, if your midterm score were 84, and your final-exam score were 92, your final score would be  $(1/4)(84) + (3/4)(92) = 21 + 69 = 90$ .

Finally, your final grade will be converted to a decimal (transcript) grade using the formula,

$$\text{Decimal Grade} = (\text{final score} - 55)/10$$

### Useful tools

You will need a calculation tool. It would suffice to have a calculator that can add, multiply, subtract, divide, and take square roots. An additional helpful calculator feature would be the ability to simultaneously compute sums and sums of squares.

In place of a calculator, we recommend a laptop computer (with a spreadsheet program, such as Microsoft Excel). A calculator or a laptop computer will be necessary for exams. See [http://faculty.washington.edu/gloftus/P317-318/317\\_318\\_tools.html](http://faculty.washington.edu/gloftus/P317-318/317_318_tools.html) for additional information.

### Topics

We will probably get through Chapter 15 of the text.

WEEK	Monday	Wednesday	Thursday	Fri Section
Week 1: 3/30	Lecture 1 R1 assigned (L1-2) HW1 assigned (L1-2)	Lecture 2	HW1 due	HW1 returned and discussed
Week 2: 4/6	EXAM 1 (L1-2, R1) R2 assigned (L3) HW2 assigned (L3-5)	Lecture 3 R3 assigned (L4-5)		Exam 1 returned and discussed
Week 3: 4/13	Lecture 4	Lecture 5	HW2 due	HW 2 returned and discussed
Week 4: 4/20	EXAM 2 (L3-5; R2-3) R4 assigned (L6) HW3 assigned (L6-8)	Lecture 6 R5 assigned (L7-8)		Exam 2 returned and discussed
Week 5: 4/27	Lecture 7	Lecture 8	HW3 Due	HW 3 returned and discussed
Week 6: 5/4	EXAM 3 (L6-8; R4-5) R6 assigned (L9) HW4 assigned (L9-11)	Lecture 9 R7 assigned (L10-11)		Exam 3 returned and discussed
Week 7: 5/11	Lecture 10	Lecture 11	HW4 Due	HW 4 returned and discussed
Week 8: 5/18	EXAM 4 (L9-11; R6-7) R8 assigned (L12) HW5 assigned (L12-13)	Lecture 12 R9 assigned (L13)		Exam 4 returned and discussed
Week 9: 5/25	HOLIDAY	Lecture 13	HW5 Due	HW 5 returned and discussed
Week 10: 6/1	EXAM 5 (L12-13; R8-9) R10 assigned (L14) FHW assigned (L14)	Lecture 14	FHW Due	Exam 5 returned and discussed; ditto FHW
Week 11: 6/8	TUESDAY 6/9 8:30-10:30: Final Exam (L1-14; R1-10; HW1-5; FHW)			

Key

L: Lectures occur every Monday when there's no exam or holiday, plus every Wednesday.

R: Readings are assigned on Mondays or Wednesdays on the web site. Numbers in parentheses indicate which lectures are covered by a particular reading assignment.

HW: Homework is assigned every other Monday on the web site; always due Thursdays at 12:30. Numbers in parentheses indicate which lectures are covered by a particular homework assignment.

EXAM: Exams occur every other week; linked to homework due previous Thursday. Numbers in parentheses indicate which lectures and readings are covered by a particular exam.

FHW: Final homework, which goes with final lecture and final exam.