

Psychology 317: Probability and Statistics, Winter, 2015

Instructor

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Office Hours: By appointment

Teaching Assistants. (NOTES: all TA office hours in Gould Coffee Shop except when noted otherwise; also, office hours will be updated after class begins).

Undergraduate TAs:

- Angel Chan: Section AA: F 8:30-9:20 SAV 169
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- Aaron Flaster: Section AB: F 9:30-10:20 MGH 234
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- Dale Kim: Section AC: F 8:30-9:20 SAV 167
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- Sullivan Swift: Section AE: F 8:30-9:20 SAV 140
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- Joel Tome: Section AF: F 9:30-10:20 SAV 167
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Graduate TA:

- Meg Grounds: Section AG: F 9:30-10:20 SAV 140
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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

Mondays and Wednesdays, 8:30 - 10:20 in ExEd 110. 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. Readings for each lecture will appear on the class web site as far in advance as possible, i.e., immediately following the previous lecture. In order to understand the material, we highly recommend that you complete the readings before the lectures to which they're relevant.

IMPORTANT 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 and bring it to lecture with you. Other handouts may be posted from time to time.

Examinations

There will be five midterm exams during the quarter, plus the final exam. Each midterm will occur on a Wednesday and will cover reading/lecture/homework through the previous week; **i.e., a midterm will not cover the material from the Monday that just precedes it.** 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 are open-book and open-note. In addition, you should bring a pocket calculator or a laptop (which you should ensure is 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 handed back and gone over during the first quiz section after the exam.

Exam answers, in the form of an Excel worksheet, as well as a copy of the exam itself will be posted on the class web site, generally within minutes of the exam's end.

You may not use the internet during exams.

Homework

There will be five homework assignments, one covering the material relevant to each of the five midterm exams. The assignments will be posted on the class web site, in the form of an Excel worksheet. Most homework problems are based on problems in the book, but there will frequently be changes from the book problems that will be noted in the posted assignment sheet. Homework assignments will also include new problems.

In all cases you will have an opportunity to go over the homework in section before the corresponding exam. Homework will be due on the Thursday preceding the corresponding exam by **12:30 pm in the class mailbox (or hand it to your TA in person any time)**, and will be returned at Friday section. Homework will be graded in a fairly superficial manner, as there will be an answer sheet for you to refer to. Please staple pages of your homework together so they will not get lost.

Homework due dates are unchangeable, immovable, and sacrosanct. If, God forbid, you should break your leg, or if you are going to be out of town, get a friend to deliver your homework for you, or email it to your TA. **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 of course if you wish, skip homework or copy it from someone else. But you will, in the end, pay dearly if you do this; i.e., it would not be smart.

Homework will be graded on a scale from 0 to 5. 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.

Homework answers, in the form of an Excel worksheet, will be posted on the class web site generally within minutes after homework assignments are due.

Sections

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

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 then 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 reasons. 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 **strongly recommend** a laptop computer (and 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

for additional information.

Excel

As you have probably noticed, this class will be highly Excel-based in that homework assignments, homework answer sheets, and Exam answer sheets will all be posted in the form of Excel worksheets. **It is very, very strongly to your advantage to become proficient in Excel if you're not already.** Knowing Excel will allow you, for example, to do your homework assignments faster by at least a factor of 3.

It is possible to do well in the course without learning Excel, but it will be considerably more difficult than if you do learn Excel.


Topics

We will probably get through Chapter 9 (and possibly into Chapter 10) of the text.

Psychology 318

Psychology 317-318 should be considered as one long five-month course. Next quarter, Psychology 318 will continue from wherever Psychology 317 left off. We will begin Psychology 318 on the first day of class (March 31, 2014) as if there had been no break. The structure of Psychology 318 will be almost identical to the structure of Psychology 317.

Schedule of Events

WEEK	Monday	Wednesday	Thursday	Fri Section
Week 1: 1/5	Lecture 1 HW1 assigned (L1-2)	Lecture 2	HW1 due HW2 assigned (L3-4)	HW1 returned and discussed
Week 2: 1/12	Lecture 3	EXAM 1 (L1-2)		Exam 1 returned and discussed
Week 3: 1/19	HOLIDAY	Lecture 4	HW2 due HW3 assigned (L5-7)	HW 2 returned and discussed
Week 4: 1/26	Lecture 5	EXAM 2 (L3-4)		Exam 2 returned and discussed
Week 5: 2/2	Lecture 6	Lecture 7	HW3 Due HW4 assigned (L8-9)	HW 3 returned and discussed
Week 6: 2/9	Lecture 8	EXAM 3 (L5-7)		Exam 3 returned and discussed
Week 7: 2/16	HOLIDAY	Lecture 9	HW4 Due HW5 assigned (L10-12)	HW 4 returned and discussed
Week 8: 2/22	Lecture 10	EXAM 4 (L8-9)		Exam 4 returned and discussed
Week 9: 3/2	Lecture 11	Lecture 12	HW5 Due FHW assigned (L13)	HW 5 returned and discussed
Week 10: 3/10	Lecture 13 HW1 assigned (L1-2)	EXAM 5 (L10-12)	FHW due	Exam 5 returned and discussed
Week 11: 3/17	<p style="text-align: center;">TUESDAY 3/17 8:30-10:30: Final Exam (L1-13)</p> <p style="text-align: center;"></p>			

Key

- Lecture: Lectures occur on Mondays when there's no holiday and on Wednesdays when there's no exam.
- HW: Homework is assigned every other Friday 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 are covered by a particular exam.
- FHW: Final homework, which goes with final lecture and final exam.