Instructor  Ranjini Grove
Office:  Padelford B-316
Email:  grover4@u.washington.edu
Office hours:  M 9:30 am - 10:20 pm, W 10:30 am - 11:20 pm or by appointment
Lectures:  MWF 8:30 a.m. - 9:20 a.m., Johnson 102
Course website:  https://catalyst.uw.edu/workspace/grover4/23385/.

TAs  David Gerard  Office hours  M/W 11:30-12:20  E-mail  gerard2@uw.edu

- Section AB:  TTh 8:30 am - 9:20 am
- Section AE:  TTh 9:30 am-10:20 am

Adam Gustafson  Office hours  M/W 10:30-11:20  E-mail  amg81@uw.edu

- Section AA:  TTh 8:30 am - 9:20 am
- Section AF:  TTh 9:30 am - 10:20 am

Sam Wang  Office hours  T/Th 10:30-11:20  E-mail  ysamwang@uw.edu

- Section AC:  TTh 8:30 am - 9:20 am
- Section AD:  TTh 9:30 am - 10:20 am

Course description  Statistics deals with the science of data. Statistical methods generally fall into one of four categories: data design, data description, probability and inference. In STAT 220, we will learn some of the basic terminology and ideas in each of these categories. Our focus will be on understanding concepts rather than theoretical derivations.

Other materials  You will need a simple calculator to do routine arithmetic calculations, a valid U.W. netid as well as access to the internet with a JAVA-enabled browser. You will also need to have a folder or 3-ring binder to organize notes, handouts etc.

Lectures  The lectures will emphasize statistical reasoning and students will be required to think and problem-solve in class. It is best if you review the relevant readings for each class prior to that class. It is also recommended that you print a copy of the instructor’s slides and bring it with you to class. This is the most efficient way to keep up with the pace of lectures. We will follow the text fairly closely, but some chapters and sections will be omitted. Please see the attached schedule for details.

Quiz sections  Quiz sections are mainly problem solving sessions with your T.A.s. The instructor and T.A. work very closely to ensure consistency in the material taught and problems to be solved are usually assigned by the instructor. These sections give you an opportunity to work in smaller groups and get more individualized help. Please take advantage of this by attending regularly and bring in your questions as much as possible. Our quizzes will also occur during quiz section.

Homework  Every week (except for the last), you will be given homework assignments. Your answers to homework problems must be typed and submitted electronically by the due date (Tuesdays and Thursdays). More information will be supplied with the first homework. No late work will be considered unless prior arrangements have been made with the instructor. Grades and comments on your work will also be posted electronically. You are encouraged to collaborate on these assignments with classmates. However, you must write up your own solutions.

Quizzes  There are expected to be three fifty minute quizzes during the quarter. They are scheduled for: Apr 23, May 14, and May 30. All quizzes are closed-book, in-class tests. They will only cover recent material and are not cumulative. If you have done and understood the homework of the preceding two weeks, you should find the quizzes straightforward.

Final  The final exam will be cumulative and held at the officially scheduled U.W. time Tuesday June 11, 8:30 am to 10:20 am. Please stay tuned for information regarding the venue.
Policies  According to University policy, the only valid reasons for missing an exam or quiz are serious illness, death in the immediate family and religious obligations provided prior notice is given. This notification can be given via e-mail to the instructor. Documentation will be required following your absence. Failure to provide sufficient documentation will result in your exam or quiz score being zero. If you earn a zero on the final exam, then your course G.P.A. will be zero. Even in the event of an acceptable absence, there will be no early, late or make-up exams. Instead the following guidelines will hold.

- if you miss two or more of the four assessments, excused or unexcused, your course grade will be zero.
- If you miss a quiz, your score will be estimated using the remainder of your quiz and final scores.
- A missed final will result in an incomplete grade for the course which can only be removed by taking the final during the next quarter.

Grades  Your course grade will be determined by your performance on the homework, quizzes and the final exam. Your overall percentage standing will be an average of all the graded components: homework (30%), quizzes (35%), final (35%). Generally, your homework and quiz scores stand as determined by the T.A.s and grader. Requests for an extra point here and there are discouraged and complaints should generally be reserved for situations where something is clearly marked incorrectly. Requests for a re-grade on the quiz must be submitted to your T.A. within three working days of receipt of the graded quiz. Requests for a re-grade on the homework must be discussed with the instructor no more than two working days after the grade has been published on catalyst.

Miscellanea  T.A.s will hold their office hours in the Statistics Tutor and Study Center located in Padelford B-302. The tutoring center is also a comfortable place to study by yourself or with classmates, and to get free help from statistics graduate students. For more information, see: http://www.stat.washington.edu/www/tutorcenter/.

You can use the catalyst tool Umail (see course website) to send e-mail to the instructor. Any feedback on the course, as well as suggestions for improvement are welcome. The tool GoPost will also be available as a resource for students to communicate with one another about the course.
Academic accommodation

To request academic accommodations due to a disability, please contact Disabled Student Services: 448 Schmitz, 206-543-8924 (V/TTY). If you have a letter from D.S.S. indicating that you have a disability which requires academic accommodations, please present the letter to the instructor so we can discuss what you might need in the class or during an exam.

Disclaimer

This document is intended to provide an overview of STAT 220. You cannot claim any rights from it. In particular, due dates or exam dates may change. While the syllabus should be a fairly reliable guide for the quarter, official announcements are always those made in class.

Tentative Schedule

We will cover chapters 1 through 23 from the text, with the exception of chapters 16, 19 and 24. Material in chapters 6, 7, 8, 9, 10, 17 and 23 will be implicitly covered as it is an easy read. A rough schedule of topics is given below. Please note that this schedule can be revised as the quarter progresses. Furthermore, the class lectures may not always coincide with the text book readings. Up-to-date information can mainly be obtained by attending lectures.

1 Week 1: Apr 1 -

4/1: Read Statistics and You ........................................................... xxxiv-xxxv
4/3: Observational Units, Variables, Studies ............................ chapter 1
4/5: Sampling Designs ................................................................. chapter 2

2 Week 2: Apr 8 - H.W. # 1 due 4/9 and 4/11.

4/8: Contd. from 4/5
4/10: Errors in Estimation ............................................................. chapter 3
4/12: Contd. from 4/10


4/15: Sampling and non-sampling errors ............................. chapter (up to 4.1)
4/17: Experiments ................................................................. chapter 5
4/19: Contd. from 4/17

4/24: Confounding chapter 5
4/26: Contd. from 4/24

5 Week 5: Apr 29 - H.W. # 4 due 4/30 and 5/2.
4/29: Summarizing Data Graphically chapter 11
5/1: Summarizing Data Numerically chapter 12
5/3: Contd from 5/1

6 Week 6: May 6 - H.W. # 5 due 5/7 and 5/9
5/6: Contd. from 5/3.
5/8: Scatter plots and Correlation chapter 14
5/10 Contd. from 5/8

5/13: Regression chapter 15
5/15: Contd. from 5/13
5/17: Errors in Regression

8 Week 8: May 20 – H.W. # 7 due 5/21 and 5/23
5/20: Contd. from 5/17
5/22: Probability Models chapter 18
5/24: Contd. from 5/22

5/27: UNIVERSITY HOLIDAY

5/29: The Normal Probability Model .................................. chapter 13

5/31 Sampling Distribution of a Population Proportion .......... chapter 13

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10 Week 10: June 3 — H.W. #9 due 6/4 and 6/6.

6/3: Confidence Interval for a Population Proportion . chapter 21 (up to 21.2)

6/5: Making a Test of Significance ...................... chapter 22, (up to pp 490)

6/7: Contd. from 6/5