

## Stat 220 Spring 2021

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Office Hours: TBD; will be announced in class and posted on Canvas

Webpage: <https://canvas.uw.edu/courses/1451021>

Class meetings: MWF 8:30 – 9:20 AM, using Zoom Link <https://washington.zoom.us/j/99688781263>

### TAs

Castiel Zhuang (AA and AB) ([cczhuang@uw.edu](mailto:cczhuang@uw.edu))

Kunhui Zhang (AC and AD) ([zhangkh@uw.edu](mailto:zhangkh@uw.edu))

Yue Ma (AE and AF) ([yuemah5@uw.edu](mailto:yuemah5@uw.edu))

The TA office hours are posted on Canvas. If you cannot make your assigned TA's office hours, feel free to attend another TAs office hours. The TAs and I meet weekly so everyone should have the same information.

### Course Description

An introduction to statistical ideas, with an emphasis on applications to real-world issues and on developing students' critical and quantitative reasoning skills. Topics include experimental design, observational studies, graphical and numerical data summaries, correlation and regression, probability, chance error and introductory inference.

### Core Learning Objectives

In this course, students will

1. Learn a variety of statistical methods.
2. Develop their statistical reasoning skills as both consumers and producers of statistics.
3. Develop an understanding of how statisticians apply methods to explore data and to answer questions of interest.
4. Improve their technical writing skills while learning to interpret and explain statistical studies done by others or statistical analyses they have conducted.

### Textbook

*Seeing Through Statistics, Fourth Edition*, by Jessica M. Utts; Cengage Learning. eBook available.

### Calculator

A basic calculator that adds/subtracts, multiplies/divides, and performs square roots will be needed for this course.

### Lectures

Most lectures will be from PowerPoint slides converted to pdf files. These will be posted by the evening before the lecture in a format of two slides per page. Some lectures will take more than one class period; this will be announced during class. I will often write on the pdf file during lecture and will post an "After Class" copy of the lecture to Canvas, usually later the same day. This will be in a format of one slide per page. Lecture meetings may also be used for activities. While we generally follow the textbook, some material is presented in more detail during the lectures. Zoom lectures will be recorded and posted when they become available.

## Quiz Sections

Quiz sections are an important part of this course. They will be used for discussions, extra problem practice (worksheets), and occasionally as time to work on homework.

## Homework

You will have one homework assignment due most weeks on Fridays, uploaded to Canvas by 11:30 PM PDT, starting with the first assignment due on 9 April.

- You may work with other students on homework, but you must write up your own solutions.
- Homework can be handwritten or typed and then uploaded to Canvas.
- If handwritten, you will need to scan or take pictures of your work and combine the pages into a pdf file for upload.
- If you scan your assignments, make sure your pages are in order, properly oriented, images are sharp, and nothing is cut off.
- Your lowest homework score as a percentage of total points will be dropped. Homework assignments will be equally weighted and account for 22% of your overall weighted percentage.
- **No late homework assignments will be accepted.**

## Homework Scoring

It will not be possible to grade all problems on each homework assignment. For each assignment, I will choose several problems (or parts of problems) that will be graded for correctness. Each problem or part will be worth 2 points. We will also grade the assignments for effort. This means that if you tried all parts of the problems, with some apparent effort, you would receive 1 – 2 points per problem. You will then have two scores, a correctness score, and an effort score. Each score will be converted to a percentage and the two percentages will be averaged. Your final score will be out of 100 points.

## Worksheet Assignments

Worksheets will generally be made available on Canvas the night before they will be covered in quiz section. Time in quiz section will be used to discuss worksheet problems.

- All worksheets will be due uploaded to Canvas by 11:30 PM PDT on the Wednesday or Friday following the Tuesday or Thursday quiz section day when the worksheet was discussed.
- There will be approximately one worksheet every two weeks. Due dates will vary depending on the topic we are covering.
- **No late worksheet assignments will be accepted.**

## Homework and Worksheet Assignment Submission Guidelines

All homework will be graded by two graders. They will switch off sections each assignment to help minimize slight differences in grading styles. The TAs or I will be the ones preparing the solutions. Worksheets will be graded by the TAs. Please use the following guidelines when completing homework and worksheet assignments:

- All problems must be done in order.
- All writing must be done in complete sentences.
- Whenever calculations are required, you must show your work or reference the R code you used. You do not need to show every “baby” step, but you must show enough work that we are convinced you know the process. **NEVER JUST PUT DOWN A NUMERIC ANSWER.** If the problem is that easy and you really do not feel that you need to show a calculation, put the answer in a complete sentence!
- While it is okay to work with other students on assignments, your write-ups must be your own.
- Your homework and worksheet answers can be handwritten or typed. If handwritten, they must be neat and easy to read. Sloppy work will not be graded, and you will receive a 0 on that assignment. If you are uploading a set of images of handwritten work, check your final pdf file before uploading to Canvas to make sure pages are in order, pages are not upside down or sideways, and that no writing is cut off of the pages.

## Quizzes

There will be four online Canvas quizzes throughout the quarter that will be available for a 24-hour window. Each quiz will emphasize material since the previous quiz, although there may be some topics that you will be expected to carry over from quiz to quiz since some course material builds from week to week.

Quizzes will be open notes and open textbook, but you may not use any other sources. You may not collaborate with any other people with taking the quizzes.

Together, the quizzes count 60% of your grade (14% each). Make-up quizzes will only be given in the case of a properly documented, excused absence, which must be arranged before the quiz. Quizzes missed due to an emergency, without prior notice, will be evaluated on a case-by-case basis. Otherwise, missed quizzes will receive a 0.

## Course Announcements

Announcements will be made in lectures and quiz sections; however, the TAs and I may post some class announcements under the “Announcements” section on Canvas. It is important for you to read all postings—**you are responsible for all information posted via announcements.** If you think you might have missed some information, you can check the “Announcements” section on Canvas at any time to see what has been posted throughout the quarter. **Please do not reply to announcements as we do not monitor the announcements for comments.** **If you have a question/comment based on an announcement, please post under the proper thread on the Course Discussion Forum, email me or your TA, or go to office hours.**

## Course Discussion Forum

Use the Discussion Forum to post questions or comments about the course, including but not limited to questions from readings in the textbook, course materials, learning objectives, or other course content. I will try to post threads to use for various topics but feel free to start your own thread for a specific topic. Feel free to respond to the comments posted by your fellow students. For guidelines about effective posting on discussion forums, please see the [Netiquette](#) information.

## Grades

Your final course grade will be determined by your overall weighted percentage based on the following categories and weights:

Category	Weight
Homework	22%
Worksheets	22%
Quizzes	56%

You need an overall weighted percentage of  $\geq 70\%$  and you need to take all the quizzes to receive a 2.0 in the course. Final grades may be based on the final weighted percentages. A curve (up or down) may be used in determining final grades. I may also adjust the grades of any students that I feel have made a positive contribution to the learning environment through their participation in the lectures, quiz sections (based on TA feedback), or Discussion Forum posts.

## Statistics Tutor and Study Center

The Statistics Tutor and Study Center (STSC) will be offering 1-on-1 30-minute tutoring appointments M – Th winter quarter starting 31 March 2021. Scheduled appointments must be made in advance (no same day appointments). Starting the second week of the quarter, there will be some added some drop-in tutor hours. Click [here](#) to schedule a tutoring appointment. Click [here](#) to see the drop-in schedule.

## Religious Accommodations

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](#). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request Form](#).

## Mental Health Resources

Any member of the UW community can call [SafeCampus](#) anytime to anonymously discuss safety and well-being concerns for yourself or others. Caring, trained professionals will talk you through options and connect you with additional resources if you want them. Available 24/7 by phone at 206-685-7233, or M-F, 8am-5pm at [safecampus@uw.edu](mailto:safecampus@uw.edu). [Crisis Connections](#) provides immediate help to individuals, families, and friends of people in emotional crisis, dealing with addiction, or struggling to meet basic needs. Anyone in Washington State can receive support and resource referrals 24/7 through their crisis line at 866-4CRISIS (866-427-4747 or TTY 206-461-3219).

## Disability Services for Students (<http://hr.uw.edu/dso/>)

To request disability accommodation, contact the Disability Services Office at: 206.543.6450 (voice), 206.543.6452 (TTY), 206.685.7264 (fax), or email at [dso@u.washington.edu](mailto:dso@u.washington.edu). The University of Washington makes every effort to honor disability accommodation requests. Requests can be responded to most effectively if received as far in advance of the event as possible, preferably at least 10 days.

**UW Diversity Statement: Diverse backgrounds, embodiments, and experiences are essential to the critical thinking endeavor at the heart of university education.** Therefore, I expect you to follow the UW Student Conduct Code in your interactions with your colleagues and me in this course by respecting the many social and cultural differences among us, which may include, but are not limited to age, cultural background, disability, ethnicity, family status, gender identity and presentation, citizenship and immigration status, national origin, race, religious and political beliefs, sex, sexual orientation, socioeconomic status, and veteran status.

### **Guidance to Students Taking Courses Outside the US**

Faculty members at U.S. universities – including the University of Washington – have the right to academic freedom which includes presenting and exploring topics and content that other governments may consider to be illegal and, therefore, choose to censor. Examples may include topics and content involving religion, gender and sexuality, human rights, democracy and representative government, and historic events.

If, as a UW student, you are living outside of the United States while taking courses remotely, you are subject to the laws of your local jurisdiction. Local authorities may limit your access to course material and take punitive action towards you. Unfortunately, the University of Washington has no authority over the laws in your jurisdictions or how local authorities enforce those laws.

If you are taking UW courses outside of the United States, you have reason to exercise caution when enrolling in courses that cover topics and issues censored in your jurisdiction. If you have concerns regarding a course or courses that you have registered for, please contact your academic advisor who will assist you in exploring options.

### **Academic Integrity and Student Conduct**

The University takes academic integrity very seriously. Behaving with integrity is part of our responsibility to our shared learning community. If you are uncertain about if something is academic misconduct, ask me. I am willing to discuss questions you might have.

Acts of academic misconduct may include but are not limited to:

- Cheating (working collaboratively on quizzes/exams and discussion submissions, sharing answers and previewing quizzes/exams)
- Plagiarism (representing the work of others as your own without giving appropriate credit to the original author(s))
- Unauthorized collaboration (working with each other on assignments)

Concerns about these or other behaviors prohibited by the Student Conduct Code will be referred for investigation and adjudication by (include information for specific campus office).

Students found to have engaged in academic misconduct may receive a zero on the assignment (or another possible outcome).

The University of Washington Student Conduct Code (WAC 478-121) defines prohibited academic and behavioral conduct and describes how the University holds students accountable as they pursue their academic goals. Allegations of misconduct by students may be referred to the appropriate campus office for investigation and resolution. More information can be found online [here](#).