

Greetings:

Welcome to the online version of Stat 311!

This online section of Stat 311 is being offered as a group start, meaning we follow the UW spring quarter schedule.

A bit about me: In addition to teaching, I currently work as a consulting statistician with a main focus on environmental statistics and ecological modeling. Although most of my work has an environmental edge, I consider myself a methods person and I'm always interested in thinking about different areas of application. As you work through this course, please don't hesitate to ask questions that might be relevant to your area of study or your interests.

I have been teaching this course for quite some time now. I have taught both the on campus course, as well as the online course. I think the field of statistics is extremely interesting and I hope that each of you finishes the course with a better sense of the discipline than what you have as you begin the course. Although you will encounter quite a number of formulas as you work through the chapters, I will argue that the study of statistics goes beyond just the numbers—you need to think of statistics as both science and an art.

This class currently has about 135 students from many different majors. For many of you this is a required course. For some of you Stat 311 may be the only statistics class you will ever take; for others of you, this course may be the first of a number of statistics type courses you take. Regardless of why you are taking this course, or how many statistics courses are in your future, you should finish this class with a better sense of how to collect data, as well as how to explore, interpret, question, and test hypotheses based on information contained in a data set. You should also gain skills that will help you process or question things that you might read or hear in the news—without having to crunch numbers.

The remaining information in this syllabus is intended to help you get started/navigate this course.

1. Finding the course website

You should be able to access the course directly from a link posted under this course in your schedule listing--the course is offered via Canvas. If you can't find the link online, the link to the main course page is <https://canvas.uw.edu/courses/1142172>

2. Navigating Canvas and Finding Assignments/Due Dates

The Canvas website has many ways to navigate to various areas. I think the easiest way to navigate in Canvas is to click on the "Syllabus" link on the left side of the home page. Scroll down and you will see a Live Course Schedule that will load the most current information. You can then click on any assignment to get to the page with the written assignment handout, PowerPoint lectures, etc.

NOTE: this quarter we will be using an online homework option from Sapling Learning. This software is still in beta testing, so you will not be charged to use the software. You will, however, need to report any errors you find to me. You will have one or more online assignments per book chapter. Due dates for the online assignments will not show up on Canvas. You will need to log into your Sapling Learning account to see the due dates, or refer to the pdf version of the class

schedule (linked via the Canvas Syllabus or the Resources Page). For the first four lessons, specific Sapling assignment due dates are specified for each lesson. For Lessons 5 – 10, I have made all Sapling assignments due on the last Saturday of the quarter June 3rd. I highly recommend that you try to do the assignments related to the Chapters covered each week in the week of the assignment. These Sapling assignments can take more time than you think you will need. But, the single due date gives you flexibility in the last half of the quarter.

3. Textbook

We are using Moore, McCabe and Craig's Introduction to the Practice of Statistics, 8th Edition. Specific textbook information is listed in Canvas on the Resources page. You have the option of a hard copy text, a loose-leaf text, or an eBook only. The UW Bookstore has both the hard copy and loose-leaf options available. You can alternatively get the eBook only option online via VitalSource.

4. The Lessons

The main information is contained in lessons 1-10.

Each lesson has three to five components:

- a. **PowerPoint lectures:** There are two to five PowerPoint lectures per lesson. The lectures include audio or you can just read through the slides and read the narration if you prefer. **YOU ARE RESPONSIBLE FOR THE MATERIAL IN THE LECTURES!** Most of the lectures follow the textbook, but there is information in the lectures that is not covered or not covered in the same level of detail as in the textbook. Pdf files of the slides are provided so, if desired, you can print them out ahead of time and take notes on them as you listen to the lectures.
- b. **Reading:** The specific sections and pages are listed for each lesson. The reading should augment the lecture material. For topics covered in the textbook, there is often more detail in the reading than is provided in the lectures. For topics not specifically covered in the textbook, however, you must refer to the lecture material. I highly recommend that you read first, then listen to the lectures, then reread or look at specific examples if necessary.
- c. **Online Assignments:** After listening to lectures and reading, I recommend you start the online problems first, before starting any written assignment. There are one or more online assignments per chapter. I have been updating the lectures from previous quarters to remove all references to "MyStatLab", the previous online homework program. If I missed removing any of these references, please ignore them (you can let me know so I can make updates) and realize we are using Sapling Learning this quarter.
- d. **Discussion Forum or Written Assignment:** You will have a set of Discussion Forum or Written assignments throughout the quarter. Discussion Forum assignments will require you to respond to a prompt that is posted in the Discussion Forum. You may also be randomly assigned to review the posts of one or more of your classmate. We will also have several written assignment that will have problems assigned from the textbook or other sources. These problems will give you a chance to put various concepts together, including giving you practice at showing your work and interpreting/explaining your results.
- e. **Extra Practice Problems:** For some lessons I have posted extra practice problems or additional useful handouts. These are optional, but recommended. The best way to learn this material is through working problems.

NOTE: one of the biggest mistakes students make is forgetting they have this class. It may be tempting to put things off since you are not going to class several times a week. I recommend thinking of the PowerPoint slides as lectures. Spread them out throughout the week. Try doing the reading before you look at the slides; try looking at the slides and then doing the reading—basically, try to figure out what works best for you. Pdf files with copies of the slides are provided for each lecture. Some students find it useful to print these out before listening, so they can add notes to the lecture slides.

Keep in mind that you do not have to memorize formulas. You will be allowed one 8.5” x 11” sheet of notes for the exams. I recommend that you try to understand how the various formulas are used, to focus on what information they give you, to learn when it is appropriate to use the various formulas, and to work on learning how to interpret the numbers.

Also, keep in mind that you should ask questions. It’s easy to get stuck on something that keeps you from moving forward. **ASK, ASK, ASK—POST questions to the course Discussion Forum on Canvas—try to chime in and answer questions that are posted by other students. Just because this is an online course, it does not mean that you need to work in isolation.**

5. Online Assignments

There is one graded problem set per chapter, which means that most weeks you will have one online assignment. The online nature of these assignments will allow you to get immediate feedback to help you determine your understanding of the material. You are allowed unlimited chances to get each problem correct although you will have fewer tries for multiple-choice problems to prevent you from purely guessing your way to the answer. You lose 5% per each problem attempt, so do your best to work all problems. You will be allowed to view solutions after the due date. No late assignments will be allowed. Do start your homework early—the assignments may take more time than you think they will. There will be no individual extensions for the online assignment due dates. All assignments are equally weighted regardless of the number of problems in the assignment; your lowest three assignments will be dropped.

Some Sapling assignments ask you to use software to find the answers. For these questions you may use software of your choice, but we will be supporting R Studio. We will post information you need to use R Studio.

I cannot easily troubleshoot issues with Sapling Learning. You can contact student support via <http://www.macmillanlearning.com/Catalog/techsupport>

Additionally, the link for student sign up instructions for Sapling Learning is <http://www2.saplinglearning.com/help/student-single-sign>

Your online scores for the Sapling assignments will be synced to Canvas as a single score out of 100 points (a percentage). Your individual scores for each assignment can be viewed on the Sapling site. All Sapling assignments are equally weighted, regardless of the number of problems in the assignment. Your lowest 3 Sapling scores will be dropped.

6. Written Assignments

All the written problems come from the exercises throughout each chapter, review sections, or other sources. You have fewer written exercises per assignment, but the expectation is that you do a very good job of writing them up. That means:

- a) Your answers are complete—this will vary by the nature of the problem.
- b) You must show your work. If you only put down an answer, you will not get any credit.
- c) You must include units, such as inches, mpg, when appropriate.
- d) You must explain the results, as appropriate, using complete sentences. Explanations include interpretations. The end result is really in the interpretation. **Explanations are required even if not explicitly stated in the problem.**
- e) Unless otherwise specified all individual written assignments must be done “**by-hand**”, meaning you can’t just use software and write down an answer. You need to show equations, calculations, and provide conclusions/interpretations when appropriate. The one exception is graphs; you may use software to create any graphs if desired (JMP is the software that comes with our text. I also encourage the use of software for checking your answers. “By-hand” is different than “handwritten”. You may type up your assignments. Word has an equation editor, which makes it much easier for adding equations to your assignments.
- f) You **MAY** work with other students on the assignments (encouraged), although you **MUST** write up your own assignments.
- g) All assignments must be upload to Canvas. All uploaded assignments must be combined into a [single file](#) for upload and must be of type .doc, .docx, or .pdf.
- h) Assignments must be readable; your solutions must be organized and your answers must be obvious (easy to find).. This means all parts of each problem are clearly labeled. Problems are submitted in order. Pages are readable (no pages cut off due to scanning, no upside down or sideways pages due to scanning, handwriting is in focus and not too light, etc.). If you handwrite your assignments, make sure to leave room between problems and parts of problems. If you type up your assignments, add some space between problems. Difficult to read assignments will not be graded!
- i) **Absolutely no late written assignments are accepted without prior approval.** All written assignments are due by 11:45 PM on the due date. If you are not familiar with the file upload process, do not wait until the last minute to upload your assignment. **If you run into technical difficulties, your assignment may be late—PLAN AHEAD!!**
- j) Your lowest written assignment score will be dropped.

7. Course Announcements

I will post 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 (or missed the email version of the announcement), 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. If you have a question/comment based on an announcement, please post under the proper thread on the Course Discussion Forum or email me.**

8. Course Discussion Forum

There are several Canvas Discussion Forums for this course. There is a General Course Discussion Forum, along with Forums for each Lesson. Please use the Lesson Forums to post any questions related to reading, lectures, or homework from that Lesson. If your question is about a specific problem, please reference the assignment and the specific problem number in the subject of the thread. If you keep the Discussion Forums organized, it tends to be easier for you to find answers to questions based on previous postings. Use the General Course Discussion Forum for general course questions. There are also threads for the midterm, final, and forming study groups.

The discussion forums are an important avenue for communicating with me and other students. As I already mentioned: **ASK, ASK, ASK—POST questions to the Course Discussion Forums—try to chime in and answer questions that are posed by other students. Just because this is an online course, it does not mean that you need to work in isolation.**

I recommend that everyone read through the Discussion Forums at least once per week. The Forum provides a substitute for listening to answers to questions that might be asked during a lecture. Although you might not have a specific question, you may benefit by reading answers to questions that were posted by other students. I encourage all students to feel free to respond to other student's questions or comments that get posted to the Forum.

9. Office Hours

I have not yet determined my office hours for spring quarter. I will post an announcement and update the website once they are known. If I have to make a change to office hours in any given week, I will post an announcement on Canvas.

If you can't make office hours and you would like to meet, please email me to see if we can schedule an appointment or a phone call.

10. Teaching Assistant

Kitty Mohammed (imm2@uw.edu) is the teaching assistant for this course. They will be holding office hours each week, responding to emails, and helping me answer questions posted on the course Discussion Forums. Kitty's office hours will be posted on Canvas and announced once they are set for the quarter.

11. Exams

There is one midterm and a final exam. Each exam is a closed-book 1 hour and 45 minute in-class exam. Exam dates and times are posted on the class schedule. Locations will be announced when they become available. There are two offerings for each exam. About one week before each exam you will be required to sign up for one of the exam times via a Catalyst survey. You must attend the exam you sign up for. You must take the final exam to pass this class. If you are out of area, you may arrange to take a proctored exam; for instructions on scheduling a proctored exam please refer to <https://uwodashboard.pce.uw.edu/exams.asp>.

12. Grades

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

Category	Weight
Online Assignments	20%
Written Homework Assignments	25%
Midterm Exam	25%
Final Exam	30%

You need an overall weighted percentage of $\geq 50\%$ and you must take the final exam to receive credit for this course (0.7 or above). Guidelines for final grades are shown below; final grades may be based on curved weighted percentages; any curve depends on how the class does overall.

Weighted Percentage Grade Range

$\geq 98+$	4.0
≥ 90 and < 98	3.5-3.9
≥ 80 and < 90	2.8-3.4
≥ 70 and < 80	1.8-2.8
≥ 60 and < 70	1.2-1.7
≥ 50 and < 60	0.7-1.1
< 50	0.0

13. Stat Tutor and Study Center

The Statistics Department staffs a statistics tutor and study center in Communications B023 (basement level). Free drop-in tutoring provided by statistics and biostatistics graduate students is available. The Tutor Center is open M – TH 10 am – 5 pm and 7 – 9 pm. You can check the weekly schedule at <http://www.stat.washington.edu/tutorcenter/>. I'm not sure what day the Center will open spring quarter. Make sure to check the schedule for dates.

14. Disability Services for Students

To request disability accommodation, contact the Disability Services Office at: [206.543.6450](tel:206.543.6450) (voice), [206.543.6452](tel:206.543.6452) (TTY), [206.685.7264](tel:206.685.7264) (fax), or email at 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.