

Math 311 Winter 2018
Statistical Concepts and Methods

Instructor: Dr. Kathy Temple

Office: Bouillon 107G

Phone: 963-1389

E-mail: Kathryn.Temple@cwu.edu

Office Hours: MWF 1 - 1:50 PM, TTh 3 - 3:50 PM, and by appointment.

Course Goals: This course will introduce you to the basic ideas of descriptive and inferential statistics, and aims especially to make you a more intelligent consumer and evaluator of statistics. Since most of the statistics you will encounter will be generated by someone else, this is important! Topics include, but are not limited to: descriptive statistics, regression, inference, and analysis of two-way tables.

Required Text: Moore, D.S., McCabe, G.P., and Craig, B.A., *Exploring the Practice of Statistics*, 1st edition, W.H. Freeman and Company. Any version of the text is fine; you will not need an access code for the online materials.

Calculator: You will need a calculator that performs at least the standard scientific functions.

Evaluation and Grading: Grades will consist of the following components: weekly quizzes (15%), weekly lab write-ups (15%), reading assignments from the text (10%), small projects (5%), two midterm exams (15% each), and a comprehensive final exam *or* final project (25%).

Tentative exam dates are Tuesday, Jan. 30, and Tuesday, Feb. 20. The final exam will be given on Friday, March 16, from 12-2 PM. Please note that the final exam time is set by the Registrar's Office and cannot be changed; in particular, no early finals will be given. You will have the option of replacing the final exam with a final project; more information will be provided on that later. Grades will be assigned according to the following scale:

		A	100-93%	A-	92.99-90%
B+	89.99-87%	B	86.99-83%	B-	82.99-80%
C+	79.99-77%	C	76.99-73%	C-	72.99-70%
D+	69.99-67%	D	66.99-63%	D-	62.99-60%
		F	59.99%		and below

General Course Policies: Daily attendance is expected and considered necessary for success. It is your responsibility to find out what was covered on days you were absent. Please bring your calculator to each class meeting. You are responsible for any announcements made in class regarding homework, exams, and quizzes. Handouts from class and homework assignments will be posted on Canvas. Please note that Tuesdays are "lab days" where class will meet in the computer lab. You will have activities to do on these days using statistical software and write-ups based on these to submit; see below.

All work handed in for the course must be written neatly, legibly, clearly, using correct mathematical notation, and with sufficient explanation. A good rule of thumb is to write your solution so that a classmate who knows roughly what's going on in the course but doesn't know how to do this particular problem can understand your solution. As a side benefit, this makes it much more likely that you will be able to understand your solution when you go back to study for exams or the final! The bottom line: for any written work handed in for the course, including lab write-ups, exams, and quizzes, *you must show your work*.

I reserve the right to adjust policies in this syllabus if necessary during the quarter.

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning, discuss your concerns with the instructor. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

Work due during the last week of classes: We will be covering new material through the end of the last week of classes. There will be a quiz on Wednesday of that week, and there will be a write-up from the regular Tuesday lab due on Friday.

Book Homework: Homework will be assigned at the end of each class. It is expected that you will do the homework problems. To aid the battle against procrastination, questions about the previous day's homework, *and only the previous day's homework*, will be taken at the beginning of class each day. Of course, I will happily take any and all homework questions during office hours. Keeping up with the homework is one of the best things you can do to help yourself succeed in this course!

Reading Assignments: Periodically, I will be assigning sections from the book to be read before class. These assignments will include a few questions to be answered, posted as a graded discussion on Canvas. Your assignment is to answer these questions by the due date (generally 11AM of the day that I want to discuss that section in class). These assignments may be given with a turnaround time of a day or two, and will form 10% of your final grade. They may not be submitted late, but to allow for illness, etc. the lowest two scores will be dropped.

Quizzes: Quizzes will be given every Wednesday at the beginning of class, with the exceptions of the weeks of exams (and the first week). Quizzes will cover the material from the previous week (Monday - Friday). No make-up quizzes will be given, but to allow for unavoidable absences the lowest quiz score will be dropped. If you must miss a Wednesday class due to a school activity (e.g. class field trip or university-sponsored athletic event), that quiz can be excused if this is requested in advance and you supply me with a note from the instructor or advisor. Quizzes will be excused only for school-related activities.

Lab Write-Ups: The lab each Tuesday will include questions to be answered, including relevant statistical analyses. Your lab write-ups must be submitted through Canvas by 4PM on Fridays. *NO credit will be given for late work, and there are no dropped lab scores.* Lab write-ups must be typed, written in complete sentences, and follow the general guidelines for written work given above.

Projects: There will be one or two smaller projects during the course of the quarter. All told, these will make up 5% of your course grade. Due dates will be announced at the time of the assignment, but expect to have at least a week to complete these. These projects are required (in contrast to the final project, which is an option to replace the final exam).

Exams: Any changes to the tentative exam dates will be announced ahead of time in class. Make-up exams must be arranged ahead of time unless you can document an unexpected circumstance beyond your control that prevented you from taking the exam. For instance, in the case of illness, a doctor's note will be required. All make-up exams must be requested as early as possible. Exams requested more than 24 hours after the scheduled exam will be given only in extreme extenuating circumstances (e.g. hospitalization, jail . . .) The final exam will be given only at the scheduled final exam time for your section.

The final exam may be replaced by a final project; more details on this will be given as the quarter progresses.