Introduction to Social Statistics (SOCY 2061) Summer 2020 (Term B)

Instructor: Aubrey Limburg, MA **Email:** aubrey.limburg@colorado.edu

Zoom Office Hours: Monday and Tuesday 10-11 am (MST) & by appointment

Zoom Office Hours Appointments: <u>Google Calendar Appointments</u> **Zoom Office Hours Location:** <u>https://cuboulder.zoom.us/j/6450910345</u>

Communication: Please reach out to me with questions, comments, and concerns via email (<u>aubrey.limburg@colorado.edu</u>). In the subject line, you must include "SOCY 2061" so that I can identify and prioritize your emails. I will respond to email within 24 hours (excluding weekends). Additionally, you are always welcome to attend virtual office hours or schedule an appointment if you would like to meet outside of office hours.

COURSE DESCRIPTION

This course is designed to introduce students to the quantitative analysis of social phenomena. A large portion of sociological research is conducted using quantitative methods. This includes utilizing national surveys, public opinion polls, census data, etc. to document, describe, and explain the social world. We will address the following conceptual pieces: 1) understanding and proper interpretation of graphs, 2) measures of central tendency, dispersion, and association, 3) and the concept of statistical significance. This class does not have any prerequisites and assumes students have only limited mathematical background.

COURSE STRUCTURE

Originally, this course was supposed to be offered as an in-person class. Due to COVID-19, this course has been transitioned to an online format. In order to best accommodate learning at your own pace online (with some weekly deadlines), this course will be broken down into five (5) modules that roughly mimic the five weeks in the course. Each week you will be asked to 1) read the textbook, 2) view short lectures, 3) complete problem set assignments, and 4) submit a quiz. You will be unable to move to the next module until you have completed the previous one. Additional details about assignments, grading, and course policy can be found later in the syllabus.

COURSE GOALS

By the end of this course, students will:

- Understand key statistical concepts, methods, and procedures used in the social sciences.
- Be able to identify when to use various statistical techniques for different kinds of research questions.
- Understand how to apply their knowledge of statistics in thinking critically about both scholarly research and popular press.

REQUIRED READINGS

There is one required textbook for the course:

- Frankfort-Nachmias, Chava, Anna Leon-Guerrero, and Georgiann Davis. 2020. <u>Social Statistics for a Diverse Society, Ninth Edition</u>. Sage Publishing.
- This textbook is available electronically for a reduced price.
- There is also a student study site that you can access: https://edge.sagepub.com/frankfort9e.



Keeping up with the readings as they are assigned is a very serious course requirement. I cannot emphasize enough how important it is in this class (and for your grade) for you to keep up with the readings.

Recommended Materials

A scientific calculator will also be of great use to in this course but is not required.

COURSE REQUIREMENTS 1

Assignment	Total Points
Discussion posts x 6 points (5)	30
Problem sets x 15 points (5)	75
Weekly quizzes x 10 points (4)	40
Final exam (50 points)	50
Total	195

Discussion posts: This course will be taking place online. This makes assessing "attendance" and "participation" tricky. I will implement a strategy that I think will allow you to interact with your classmates and help you learn statistics. Therefore, each student will be required to submit two discussion posts on a weekly basis by Friday at 5 pm:

- 1. Your first post will include a question related to the material or homework that you are struggling with in a given module.
- 2. Your second post will need to be a response to at least two other students in the discussion board. This will give students an opportunity to work together to solve problems related to course materials.

Problem sets: The only way to learn statistics is to actually do it! You will be required to complete five (5) problem sets (one each week) that you will complete on your own. Homework is due every Friday at 5pm. Please note that problem set answer keys will be posted immediately following the submission deadline. This will allow you to quickly review your homework and better understand what you may have missed prior to taking the weekly quiz. I will still grade your homework and those grades to Canvas.

There are some key characteristics of these problem sets that are also important to note:

¹ This syllabus is subject to change during the course of the semester. However, total workload will not increase if changes are made.

- 1. You must show your work to get full credit. This will become increasingly important as we get into the second half of the class.
- 2. All problem sets must be submitted as a single word documents or PDF. You may complete your homework electronically (be sure to show work) or you can complete it by hand and either scan or take photos of it. If you choose the second option, be extra careful to correctly identify each question, write legibly, highlight your final answer, keep the document organized, and still submit it as one single word document or PDF.

Weekly quizzes: There will be a total of four (4) quizzes in this course that will take place at the end of each week (except the final week). Quizzes are cumulative in the sense that you must understand previous concepts in order to be able to answer current questions. Quizzes will be made available on the Friday of each week. The quiz must be completed by Sunday at 11:59 pm. Due to the nature of this course, all quizzes will be open book and open note.

Final exam: One final exam will take place on the last day of the term (August 7th). This exam will include materials presented in all five modules in this course (e.g., cumulative).

Extra Credit (5 points): You will have an opportunity for extra credit in this course in the form of a syllabus quiz. The syllabus quiz is only for the first several days of class and will be due at 11:59 pm on July 9th. Please note you will have 5 minutes to complete this quiz so be sure to have reviewed the syllabus in its entirety prior to beginning.

CLASSROOM POLICIES

Classroom climate

Creating a welcoming and safe space for students to learn is imperative to my goals as an educator. Therefore, please keep the following guidelines in mind to make the environment a respectful and enjoyable place to be:

- We critique ideas, not people.
- Speak (and write) responsibly. This means knowing your words have consequences. Be willing to own that and choose how you speak.
- If you have a question, ask. If you have a concern or suggestion, share it.
- If I or another student have upset, offended, or misunderstood you in any way, let me/us know.
- Ask for help if you are not doing as well as you'd like or don't understand something.

Grades

In general, for every credit hour, it is expected that you spend at least 2 hours of time outside of class reading and/or doing class work. This course will be much faster paced than a normal 16-week class. It is your responsibility to be well versed with the syllabus, structure of the course, and your responsibilities as a student. Students who do not spend at least 15 hours a week on class work on a weekly basis will likely find it challenging to receive an A in this course. Finally, due to FERPA regulations, I am unable to discuss grades via email. If you are concerned about your grade, please email me as soon as possible so that we can chat via Zoom.

The following scheme is how I will calculate your overall grade in the course:

A	94 - 100	В	84 - 86	C	74 - 76	D	64 - 66
A-	90 - 93	B-	80 - 83	C-	70 - 73	D-	60 - 63
B+	87 - 89	C+	77 - 79	D+	67 - 69	F	< 59

Technology

Since this course will be offered online, it will be imperative to your success in the course that you have regular access to Canvas via a computer. Although we will not be meeting in real time, I do suggest that you find a routine each day for when to log on and complete your work.

Office Hours

Office hours are an absolutely fantastic place to get help – they allow you to meet with your instructor one-on-one to get assistance with the course. This could be as simple as asking a clarifying question about lecture or readings, but you can also use this time to get assistance with your class work. Please schedule an appointment via <u>Google Calendar</u> during office hours or email me to request an appointment.

Late work

Late work may be accepted in extenuating circumstances (e.g. severe illness, death- or dying-related situations, jury duty, court appearance) with a point deduction. Points will be deducted as follows: 40% deduction for <24 hours after assignment due date; 50% deduction for 24-48 hours; 60% deduction for 48-72 hours; assignments will not be accepted after 72 hours (3 days). This late work policy is due in part to the fact that homework keys will be posted immediately following a deadline so that you can quickly review homework problems on your own.

DETAILED COURSE SCHEDULE

Module	Dates	Sub- module	Topic	Readings	Homework	Quiz
1	7/7 - 7/10	1.1	PEMDAS review	PEMDAS Review	Dualilana Cat	On:- #1
		1.2	Levels of measurement	Chapter 1	Problem Set #1	Quiz #1 (Sunday)
		1.3	Frequency distributions	Chapter 2 (27-43)	#1	(Sunday)
		1.4	Visual presentations of data	Chapter 2 (43-56)		
2	7/13 - 7/17	2.1	Measures of central tendency	Chapter 3	Problem Set #2	Quiz #2 (Sunday)
		2.2	Measures of dispersion	Chapter 4		
		2.3	Normal distribution	Chapter 5		
3	7/20 - 7/24	3.1	Sampling	Chapter 6	Problem Set #3	Quiz #3 (Sunday)
		3.2	Confidence intervals	Chapter 7		
		3.3	Hypothesis testing	Chapter 8		
4	7/27 - 7/31	4.1	Bivariate Tables	Chapter 9	Problem Set	Quiz #4 (Sunday)
		4.2	Chi-square	Chapter 10	#4	
		4.3	ANOVA	Chapter 11		
5	8/3 - 8/7	5.1	Correlation	Chapter 12	Problem Set #5	Final
		5.2	Bivariate regression	Chapter 12		Exam
		5.3	Review	N/A	11.5	(Friday)

UNIVERSITY POLICIES

Accommodation for Disabilities

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website.

Classroom Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the Honor Code Office website.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website.

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

Religious Holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, you should notify me at least two weeks in advance to request special accommodation if you have a conflict. See the <u>campus policy regarding religious observances</u> for full details.