# Sociology 210 Quantitative Sociological Analysis Colorado State University

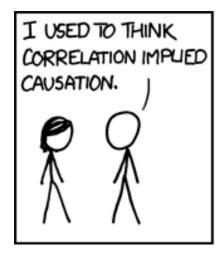
**Summer 2018** 

Professor: Dr. Orestes P. Hastings (Pat.Hastings@colostate.edu)

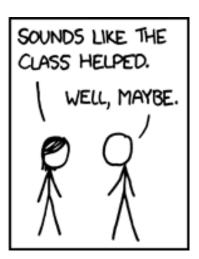
Office Hours: Immediately after every class and by appointment in Clark B266

Lecture: Monday through Friday, May 14-June 8 at 9:50-11:50am in Clark C144

Canvas Website: <a href="https://colostate.instructure.com/courses/66809">https://colostate.instructure.com/courses/66809</a>







#### Overview

This course is designed to introduce students to the basic statistical concepts and tools used by sociologists conduct empirical research. Topics covered in this course will include descriptive statistics, measures of central tendency and variability, probability, statistical inference and hypothesis testing, correlation, and multiple regression. Throughout the course, these topics will be illustrated through relevant sociological examples and applications. Student will put the ideas into practice by completing a large number of problems—both inside and outside of class—and taking the exams.

#### **Learning Goals**

- Understand how sociological questions can be answered with quantitative data
- Become familiar with the basic concepts, methods and techniques of statistical analysis in the sociology
- Be able to explain the differences among various statistical techniques and identify an appropriate technique for a given set of variables and research questions
- Develop skill for thinking critically about scholarly research and popular press reports of quantitative data and research
- Build a strong foundation in order to excel in future social science quantitative methods courses or any other arena where it is important to make sense out of quantitative evidence

#### **Evaluation**

Your grade will be based on:

- Problem sets (40%)
- Exam 1 (10%)
- Exam 2 (15%)
- Exam 3 (15%)
- Exam 4 (final) (20%)

## Problem sets (40%)

I will assign a large number of problems—mostly from the textbook—for you to complete. Many of these we will do together in class. Others you will complete outside of class, but you are welcome to work together. I will let you know which problems need to be turned in and when. Because you will be doing problems every class, attendance and active participation is absolutely critical to your success in this course.

## Exams (60%)

The four exams will focus on evaluating your understanding of the main ideas and concepts, not how well you can memorize facts. As such, you may use your textbook, notes, and calculator on the exams. The exams will be cumulative, but weighted towards new material.

#### Final Grades

You will be graded on an A-F, +/- system, which will be awarded using the percentages in the table at right (fractions of a percent will be rounded *up* to the nearest whole number). If you have any issues or concerns with your grades, contact me as soon as possible. Incompletes will only be granted in exceptional circumstances.

#### Missing class and exams

Late work or make-up exams will only be accepted in exceptional circumstances. I understand that unfortunately personal and family emergencies do happen. Please contact me if something does come up, and we will work towards finding an appropriate solution. If you are going to be at a University sponsored event or need accommodation to observe an

Letter	Percent	
Grade	Range	
A+	97%-100%	
Α	93%-96%	
A-	90%-92%	
B+	87%-89%	
В	83%-86%	
B-	80%-82%	
C+	77%-79%	
С	70%-76%	
D	60%-69%	
F	Below 60%	

established religious holiday, please let me know as soon as possible so that we can make adequate arrangements.

#### **Textbook and Calculator**

There is one required book for this course:

Frankfort-Nachmias, Chava and Anna Leon-Guerrero. 2018. *Social Statistics for A Diverse Society* (8<sup>th</sup> edition). Sage Publications, Inc. (ISBN: 9781506347202) https://us.sagepub.com/en-us/nam/social-statistics-for-a-diverse-society/book249326

You will need a scientific calculator in class. You do not need a graphing calculator.

Bring your textbook and calculator to every class. And you will also be able to use them on the exams!

## **Other Important Matters**

# Technology

Do not use your phone/computer/tablet for non-class purposes during class. Doing so will negatively affect your grade.

## In-Class Decorum

Please come to class on time and be ready to engage the material we are covering in class. Colorado State University has stated five Principles of the Community: inclusion, integrity, respect, service and social justice (<a href="http://diversity.colostate.edu/principles-of-community/">http://diversity.colostate.edu/principles-of-community/</a>). Your conduct in this class should adhere to these to help us generate an open, tolerant, and respectful learning environment that we can all succeed in.

## Office hours

I encourage you to take advantage of my office hours. I am happy to discuss course material, the assignments, your sociological interests, or anything else that would be useful to you.

# Academic Integrity

The course will adhere to the Academic Integrity Policy of the Colorado State University General Catalog (<a href="http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/">http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/</a>) and the Student Conduct Code (<a href="https://tilt.colostate.edu/integrity/knowTheCode/">https://tilt.colostate.edu/integrity/knowTheCode/</a>). Do your own work. Don't cheat. Violations will be addressed through the appropriate University mechanisms.

#### Resources for Disabled Students

If you have a diagnosed learning or physical disability, which may require special accommodations, please talk to me at the beginning of the semester. The university's Resources for Disabled Students (<a href="http://rds.colostate.edu/">http://rds.colostate.edu/</a>) can also help facilitate your individual needs. I will work with you and the RDS to make sure that any individual needs are appropriately accommodated.

# Support

Any student who may be the victim of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is encouraged to report to CSU through one or more of the following resources:

- Emergency Response 911
- Deputy Title IX Coordinator/Office of Support and Safety Assessment (970) 491-1350
- Colorado State University Police Department (non-emergency) (970) 491-6425

For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at: <a href="http://health.colostate.edu/">http://health.colostate.edu/</a>

And, the Sexual Assault Victim Assistance Team is a confidential student resource that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is <a href="http://www.wgac.colostate.edu/need-help-support">http://www.wgac.colostate.edu/need-help-support</a>.

Need Help? CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970-491-6053 or go to <a href="http://health.colostate.edu">http://health.colostate.edu</a>. If you are concerned about a friend or peer, tell someone by calling 970-491-1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources

(<u>http://supportandsafety.colostate.edu/tellsomeone</u>). Rams take care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

# **COURSE OUTLINE**

The instructor may change the schedule depending on how quickly and slowly topics are covered and how the class is doing. If there are changes to this schedule, you will receive adequate notice.

#	Date	Topic(s)	Readings Covered
1	5/14	Introduction; Hypotheses and Causality; Levels of Measurement	Chapter 1
2	5/15	Frequency distributions and graphical representations of them	Chapter 2
3	5/16	Measures of Central Tendency	Chapter 3
4	5/17	Measures of Variability	Chapter 4
5	5/18	Exam 1	
6	5/21	The Normal Distribution	Chapter 5
7	5/22	Sampling	Chapter 6
8	5/23	Central Limit Theorem	Chapter 6
9	5/24	Estimation and Confidence Intervals	Chapter 7
10	5/25	Exam 2	
	5/28	Memorial Day, no class!	
11	5/29	Testing hypotheses	Chapter 8
12	5/30	Bivariate Tables	Chapter 9
13	5/31	Chi-square test	Chapter 10
14	6/1	Exam 3	
15	6/4	Analysis of Variance	Chapter 11
16	6/5	Correlation	Chapter 12
17	6/6	Regression	Chapter 12
18	6/7	Multiple Regression, catching up, wrapping up	Chapter 12
19	6/8	Final Exam	