



## **Course Information**

Course Number:	210
Course Title:	Statistics for the Social Sciences
Section:	01
Time:	MW: 10:00AM-11:15AM
Location:	Albert C. Jacobs Life Sciences Center (LSC), Room 137
Credit Hours:	1.00 units

### **Instructor Details**

Instructor:	MJ Vickers
Office:	Seabury S-013
Phone:	(860) 297-2077
E-Mail:	maryjane.vickers@trincoll.edu
Office Hours:	TR 10:00am-1:00pm, W 3:00pm-5:00pm ( <i>By appointment only!</i> )
	<u>CLICK HERE</u> to schedule (You must schedule at least 12 hours in advance.)

### **Course Description**

This course offers an advanced exploration of research methods as used in humanities disciplines. This course focuses primarily on quantitative methods and statistical analysis. This course also emphasizes the development of sociological writing and analyzing and exploring data. A key goal for this course is to develop students' statistical knowledge for implementation of sociological research. Mutual respect and civility are expected when taking this course.

### **Course Prerequisites**

C- or better in Sociology 101: Principles of Sociology.

### **Special Course Designation**

Meets Numerical & Symbolic Reasoning Requirement (NUM).

### **Course Format Details**

Course assignments will be available through **Moodle.** Please come to class prepared with any material assigned for that week.

### **Course Goals**

The goals of this course are for students to 1) understand various statistical analyses, such as central tendency and linear regression, 2) develop an analytical perspective to evaluate sociological data in the form of graphs and tables, 3) interpret and assess quantitative data in the form of statistical data, 4) develop the ability to generate, organize, and interpret statistics using computer software (Excel), 5)



improve and encourage critical thinking, and 6) provide skills and resources to foster effective life-long learning.

### **Course Learning Outcomes**

Students who successfully complete this course will be able to:

- 1. Define, differentiate, and identify various statistical analyses including Linear Regression and Chi-Square Distribution.
- 2. Perform advanced data analysis and interpretation including producing graphs and analyzing statistical and qualitative data.
- 3. Write critically about various sociological methods and their strengths and weaknesses.
- 4. Implement strategies for thinking critically about our sociological world and sociological research.
- 5. Develop a sociological imagination!

### **Course Materials**

#### **Required Tech:**

You will need access to Microsoft Excel (most versions will work) to create graphs and perform calculations for this course's labs and exams.

You can access Microsoft Office 365 for free as a student by going to <u>https://www.trincoll.edu/lits/technology/software/office365/</u> for more information.

\*Please note: I typically use the DESKTOP version of Microsoft Excel 365 for in-class demonstrations. If you are using the BROWSER version of Excel 365, your interface may look slightly different.

#### **Required Textbook:**

*Social Statistics for a Diverse Society 9e* by Chava Frankfort-Nachmias, Anna Leon-Guerrero, and Georgiann Davis, 2020, SAGE Publications, Inc. **ISBN: 9781544358666** 

Your textbook has helpful online materials, including flashcards, video demonstrations for Excel, practice problems, and study questions which you can access here: <a href="https://edge.sagepub.com/frankfort9e/student-resources">https://edge.sagepub.com/frankfort9e/student-resources</a>.

\*Please note: you will need to create a SAGE Edge account (free) to access these materials. These materials are NOT required for the course, but may be helpful to you.

If at any time you require financial assistance with course materials, especially textbooks, please reach out to the **Student Emergency and Equity Fund**, which you can find by <u>clicking here</u>.



# **Grading Policy**

#### Calculation of Course Grades (See course calendar for dates)

**\*\*\*PLEASE NOTE:** The final grade calculation on Moodle may not be accurate to your actual final grade.

#### Table 1: Assignment Points and Weighted Percentages

		-	Weighted Percentage (%)
		<b>Total Points</b>	of Final Grade
Tests	Exam 1	100	25%
	Exam 2	100	25%
	Exam 3	100	25%
Assignments	Labs (Moodle)	300	15%
	Extra Credit	30	5%
Attendance		100	10%
	TOTAL	730	105%

#### Table 2: Weighted Grade Percentage to Course Letter Grade

Percentage (%)	Course Letter Grade
89.5 - 100%	А
79.5 – 89.4%	В
69.5 – 79.4%	С
59.5 - 69.4%	D
Less than 59.4%	F

**Calculating Your Weighted Final Grade:** To calculate your final grade, take the average of your scores for each category, then multiply them by their weighted percentage. Add everything up to see your final weighted score.

For example, your exams are worth 45% (15% each) of your final grade. Let's say you score a 75, 80, and 90 on the three exams.

Take the AVERAGE of these scores: (75 + 80 + 90)/3 = 81.66

Then, multiply that number by 45% (0.45): 81.66 \* 0.45 = 36.75

Do this calculation for your labs, attendance, Packbacks, etc. and add all weighted averages together to get your final grade.

You can also use the following website to help you calculate your grades: https://www.rapidtables.com/calc/grade/grade-calculator.html



Access to Grades: Grades will be posted in the Moodle Gradebook. If you would like to discuss your grade or believe there has been an error, schedule a meeting with me during office hours immediately.

It is a violation of the Family Educational Rights and Privacy Act of 1974 (FERPA) to reveal any information about grades or student status over the phone or in email, even with student permission or at student request.

Extra Credit: I will allow up to two (2) additional assignments that may be completed for extra credit.

Late or Missed Work: Deadlines are set but I will accept late work. If an assignment is not turned in by the due date/time, it will receive a zero (0). HOWEVER, you can still turn in work up to three days after the due date and I will grade it. Any work turned in beyond the three-day grace period will receive a 10% penalty for each subsequent day it is late. Please contact me immediately if you need more time on an assignment, especially if you have disability accommodation.

**Borderline Grades:** All points in this class must be earned. Extra points will not be awarded for the sole purpose of boosting a grade. However, there will be a small curve for rounding up half-point grades, such as raising an 89.5 to a 90. If you have questions or concerns regarding your grades, please meet with me during my office hours.

**Incompletes:** Grades of "incomplete" (I) are given only under extraordinary circumstances that occur near the end of the semester, and require that students provide detailed documentation in order to justify the grade (e.g. serious injury, or illness of the student, or serious illness, injury or death in the student's immediate family). An incomplete grade will NOT be given under any other circumstances. If you find that you are in a situation that negatively impacts your ability to successfully complete the course, contact me immediately to discuss strategies to improve your performance. **Do NOT wait until the end of the semester when time is severely limited**. More information about Incomplete grades can be found at <a href="https://www.trincoll.edu/dean-of-students/campus-life-resources/academic-resources/course-incomplete/">https://www.trincoll.edu/dean-of-students/campus-life-resources/academic-resources/course-incomplete/</a>.

\*\*\*Please check your Trinity College student email account daily, because important information about this class could be emailed to you. Please consult the course's Moodle page and your university e-mail account for important updates regarding classes, the course calendar, and assignments. Packback also includes reminders of upcoming assignments. A breakdown of course requirements and how each will contribute to your grade is included below.

### **Graded Course Components**

**Scheduled Exams (100 points each):** There will be a total of three *online, take-home* exams in this course. Exams will consist of 25 multiple choice questions, worth 2 points each, and two short answer questions worth 25 points each (100 total). None of the three exams will be comprehensive. They will only cover what has been discussed in class up until the test date, or since the last exam. This will include the lecture material and assigned readings and other media from the book or Moodle. You will find the dates for all three exams in the course calendar at the end of the syllabus. They will be available for a week, and you do not have to complete them in one sitting. If you miss an exam, you will need to provide documentation of excused absence and schedule a make-up exam. Make-up exams will be the



same format as the other exams, but will have a maximum score cap of 70/100 points. <mark>Class will meet</mark> <mark>at the regularly scheduled times the weeks exams are available.</mark>

\*\*\*If you know in advance that you will be unable to take an exam or may miss the scheduled day of the exam, please notify me as soon as you can and provide any and all necessary excuse documentation. This gives me time to schedule a make-up for you.

**Attendance (100 points):** Attendance for this course will be recorded for a small portion of the grade for this course. If you need to miss class for *any reason*, please reach out to me and let me know. If you will be absent for an extended period of time (especially due to a health reason), please reach out and I will be happy to work with you.

Labs (25 points each/300 total): Each week, you will be expected to complete a stats lab on Moodle. These labs are designed to help you practice with Microsoft Excel and to develop your writing ability about statistical evidence. You may also need to generate and attach graphs, tables, and charts to your submission. There will be 12 labs, each worth 25 points for a total of 300 points (worth 15% of your grade). Late labs will not be accepted after three days past the original due date.

### Important Note About Grades (PLEASE READ)

During the semester, you may find yourself struggling with grades, work, family, or life in general. If you are worried about your performance in the course, please talk to me and I will be happy to work with you on a solution. **DO NOT WAIT until the end of the semester when grades are due to start improving your grade**. It is extremely difficult to address situations like this at the last possible minute and there will likely be extremely limited options for improvement. It is imperative you talk to me *BEFORE* that point. A stitch in time saves nine – in other words, it is better to address a problem early on rather than waiting until later when the problem is worse!

# Additional Information and University Policies

### **Civility Statement**

Students of all backgrounds are welcome in this course. We will discuss topics which may include sensitive subjects, such as race, gender, social class, politics, and more. Information in this course may challenge your beliefs or assumptions. As this is a social science class, please understand this information is being presented to you on the basis of scientific data and research, not anyone's personal opinions. It is perfectly fine to be curious, confused, or unsure – that means you are learning! However, please remember that civility and mutual respect are required when discussing the topics covered in this course, and intolerance will not be tolerated (see Karl Popper's paradox of tolerance). Disruption and disrespect inside or outside of the classroom will be addressed following university guidelines.

### **Intellectual Honesty**



In accordance with the Trinity College Student Integrity Contract (pp. 4-5 (<u>https://www.trincoll.edu/dean-of-students/community-standards/</u>), students are expected to abide by the highest standards of intellectual honesty in all academic exercises. Intellectual honesty assumes that students do their own work and that they credit properly those upon whose work and thought they draw. It is the responsibility of each student to make sure that he or she is fully aware of what constitutes intellectually honest work in every examination, quiz, paper, lab- oratory report, homework assignment, or other academic exercise submitted for evaluation in a course at Trinity College.

More information about Trinity's policies for Intellectual Honesty, and Procedures for Adjudication of Dishonesty Cases can be found in your Student Handbook on pp. 29-38 and pp. 31-32. (https://www.trincoll.edu/wp-content/uploads/2021/01/StudentHandbook.pdf).

### Statement on the Use of A.I.

There is an ongoing discussion in academia regarding the use of artificial intelligence (A.I.) in the classroom, and the growing prevalence of its use among students across the country. Whether or not you have personally used generative A.I. in the past or present, please know its use is expressly prohibited in this course. I expect any and all assignments to be written by you, not a robot. Please also be aware that using A.I. to write your assignments for you constitutes plagiarism and is a violation of academic integrity. Any assignments which contain any A.I.-written content will receive a zero. Why should I bother to grade something you didn't bother to write?

Not everyone enjoys writing, but it is an important skill to develop, and college is an excellent place to do so. By using a computer to write your assignments, you are cheating yourself out of an education. A.I. writing can also be extremely inconsistent, contain factual errors, and often scrapes (i.e. steals) from other sources to generate its content.

**A.I cannot think, but** *you can*. Please use this course as an opportunity to develop your own voice and refine your writing skills. It will pay off later, especially on the job market where effective writing (and a unique voice) will make you a strong candidate.

### Americans with Disabilities Act (ADA) Policy

Trinity College is committed to creating an inclusive and accessible learning environment consistent with the Americans with Disabilities Act. Students with disabilities who may need some accommodation in order to fully participate in this class are urged to contact the Student Accessibility Resource Center, as soon as possible, to explore what arrangements need to be made to assure access.

If you have approval for academic accommodations, please notify me by the end of week two of classes. For those students with accommodations approved after the start of the semester, a minimum of 10 days' notice is required. Please be sure to meet with me privately to discuss implementation.

Student Accessibility Resources can be reached by emailing <u>SARC@trincoll.edu</u>.



### **Title IX Statement**

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance..." 20 U.S.C. § 1681.

Title IX of the Education Amendments of 1972 (Title IX) is a federal civil rights law that prohibits discrimination on the basis of sex in educational programs and activities that receive federal financial assistance. If only one of an educational institution's programs or activities receives federal funding, all of the programs within the institution must comply with Title IX and its implementing regulations. Accordingly, Trinity College prohibits discrimination on the basis of sex in all of its programs and activities, including academics, employment, athletics, and other extracurricular activities. This prohibition includes gender-based harassment, sexual violence and other sexual harassment. Compliance with Title IX is a community-wide responsibility. The information here provides an overview of the <u>College's policy</u>, who you may contact with questions about Title IX, and how you can report sexual harassment and discrimination.

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Questions regarding Title IX may be referred to the College's Title IX Coordinator, Shannon Lynch, located at 208 Mather Hall, 300 Summit St. Hartford, CT 06106, or via email at <u>titleixcoordinator@trincoll.edu</u>. Students may also access Title IX information through the U.S. Department of Education, Office for Civil Rights, 8th Floor, Five Post Office Square, Boston MA 02109-3921. Telephone: 617.289.0111, Fax: 617.289.0150, TDD: 800.877.8339, or Email: <u>ocr.boston@ed.gov</u>.

### Statement on Mental Health and Wellness

Mental health and well-being are just as important as one's physical health. If you ever feel you need assistance or someone to talk to, please reach out to Trinity College's Counseling and Wellness Center.

#### From the Counseling and Wellness Center website:

The Trinity Counseling and Wellness Center provides a full range of counseling and psychological services to all students who desire assistance in coping with personal and emotional difficulties and social relationships. All services offered by the center are free, and all contact with members of the staff is privileged and confidential as provided by law.

Students may call the Center at **(860) 297-2415** between 8:30 a.m. and 4:30 p.m. and our office manager, Elif, will help to set up an appointment as soon as possible. You can meet our staff members on our <u>staff page</u>.

Usually, an appointment can be set up relatively promptly within a few days to a week. During busy periods, or if a student wishes an appointment with a specific person or at a specific time of day, it may be longer before a time can be scheduled. If it is an urgent situation, we will schedule you as soon as possible for a one-time emergency appointment. Appointments may routinely be made as early as 9:00



a.m. or as late as 3:45 p.m., Monday through Friday. You can also e-mail <u>Haben Abraham</u>, with any questions.

# Tentative Course Schedule

Unit #	Topic(s) and Important Dates	Readings	Assignments
0	Introduction to the Course		
9/4			
1	Key Terms and Why Stats Are Important	1: The What and the Why of Statistics	Lab 1
9/9-9/11			DUE 9/15 11:59pm
2	Presenting Data: Graphs	2: The Organization and Graphic Presentation of	Lab 2
9/16-9/18		Data	DUE 9/22 11:59pm
3	What things are the same?	3: Measures of Central Tendency	Lab 3
9/23-9/25			DUE 9/29 11:59pm
4	What things are different?	4: Measures of Variability	Lab 4
9/30-10/2			DUE 10/6 11:59pm



Exam 1 (ONLINE)	Exam 1 will be available on Moodle beginning on 10/2 at 5pm and will close on 10/11 at 11:59pm. Class will meet at the regularly scheduled times the weeks exams are available.	Chs. 1-4	
5 10.7-10/9	The Superstar of Statistics: The Bell Curve	5: The Normal Distribution	Lab 5 DUE 10/13 11:59pm
10/14-10/15	Trinity Days (no class)		
6 10/16-10/21	How do I pick what I wanna pick?	6: Sampling and Sampling Distributions	Lab 6 DUE 10/27 11:59pm
7 10/23-10/28	How can we be sure we're sure?	7: Estimation	Lab 7 DUE 11/3 11:59pm
8 10/30-11/4	Do our data support our hypotheses?	8: Testing Hypotheses	Lab 8 DUE 11/10 11:59pm
Exam 2 (ONLINE)	Exam 2 will be available on Moodle beginning on 11/4 at 5pm and will close on 11/11 at 11:59pm.	Chs. 5-8	



# Course Syllabus

9 11/6-11/11	Variable vs. Variable!	9: Bivariate Tables	Lab 9 DUE 11/17 11:59pm
10 11/13-11/18	Farm-Fresh, Good Data: The Chi- Square Distribution	10: The Chi-Square Test and Measures of Association	Lab 10 DUE 11/24 11:59pm
11 11/20-11/25	Alphabet Soup: Where are these variables?	11: Analysis of Variance	Lab 11 DUE 12/1 11:59pm
*11/26-12/1	Thanksgiving Break	*Starts after the last class on 11/26	
12 12/2-12/4	Just how close is "close"?	12: Regression and Correlation	Lab 12 DUE 12/8 11:59pm
Exam 3 (ONLINE)	Exam 3 will be available on Moodle from 12/4 at 5pm- 12/13 5:00pm.	Chs. 9-12	