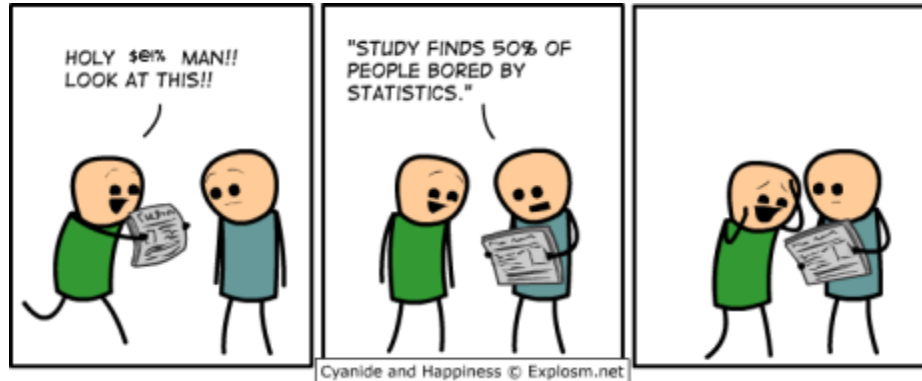


# SOCIOLOGY 3070: Quantitative Analysis & Survey Research

Fall 2021



Instructor: Emily K. Carian

Email: [emily.carian@csusb.edu](mailto:emily.carian@csusb.edu)

Zoom drop-in office hours: Wednesdays 4-5pm, Thursdays 1-3pm, and by appointment if those times do not work for you (just email me and we'll find a time!)  
<https://csusb.zoom.us/j/94236533601>

### *Tips for Succeeding in This Class*

- Try to complete coursework by the due date. There is no penalty for late work, but completing the coursework on time ensures you stay on track to complete the course and helps Professor Carian with her grading load.
- Check the answer key after you submit course assignments and read Professor Carian's feedback on graded labs. Understanding what you did wrong on previous work will prepare you for quizzes and is one of your main responsibilities as a student in this class.
- Writing is a big part of this class because how you interpret something—the words you use—matters a lot in statistics. Pay attention to the example answers Professor Carian's provides. What words does she use? How does she write about statistics? Use her answers as models and pay attention to all instruction about writing!
- Thoroughly read the email announcements Professor Carian sends. They have important information about course material; paying attention to them will help you do better on your assignments.
- Make a "cheat sheet" before each quiz with important information and example answers. You can use this when you take your quiz!
- If something on Blackboard is not working properly, tell Professor Carian right away!

### ***Coronavirus/COVID-19/Economic Recession***

This semester will be difficult for all of us. Some of us will be trying to complete coursework while watching children or caring for sick loved ones or working extra shifts. My first priority is your health and safety. **Please tell me how I can support you during this time.** I can make accommodations for you (e.g., extended deadlines) and I may be able to point you toward resources. I also ask for your patience as I work to re-design this class so it works online. Thank you for your understanding.

### ***Course Description and Objectives***

Welcome to Sociology 3070: Quantitative Analysis & Survey Research! The goal of this course is to familiarize you with the survey techniques and statistical methods sociologists use to answer questions about the social world. This course will help you become a better *consumer* of research: you will be able to critically evaluate claims you read in class, the news, on social media, and elsewhere. This course will also help you become a *producer* of research: you will be able to ask and answer your own research questions in a scientifically valid way. Our class will cover research design, conceptualization, operationalization, research ethics, null and alternative hypotheses, t-tests, chi-square tests of independence, and correlation.

By the end of the course, you will be able to:

- articulate and resolve ethical issues involved in research.
- design survey research, with attention to sampling, conceptualization, and operationalization.
- identify and implement appropriate statistical tests to describe patterns in data and draw conclusions.
- interpret descriptive statistics and statistical analyses.
- convey research findings in writing.

### ***Required Materials***

There is no required textbook for this course. Required and recommended readings will be posted on Blackboard. You are required to make use of our Blackboard site. Please make sure you can access it and spend some time familiarizing yourself with where everything is. **\*If you do not have access to a reliable Internet source and a computer/laptop, please let me know immediately.\***

### ***Grading and Assignments***

You will be graded according to the following scale:

A = 93% and higher	C = 73-76%
A- = 90-92%	C- = 70-72%
B+ = 87-89%	D+ = 67-69%
B = 83-86%	D = 63-66%
B- = 80-82%	D- = 59-62%
C+ = 77-79%	F = 58% and lower

Your percent score is based on the following scheme:

Course Assignments:	30%
Lab Reports:	30%
Quizzes:	40%

### ***Course Assignments (30%):***

Each week, you will complete course assignments (or “practice” assignments). Course assignments are graded based on whether you completed the assignment (not on whether you got the answers right).

**\*As soon as you complete an assignment, you will be able to compare your answers to the correct ones. Make sure you do this! It is the best way to learn and is one of your main responsibilities as a student.\***

All assignments are posted in the weekly folders on Blackboard. Course assignments are due by Sundays at midnight.

### ***Lab Reports (30%):***

The purpose of lab is to give you practice in applying the statistical techniques we learn and interpreting results. Labs are posted in the weekly folders on Blackboard. Labs are also due by Sundays at midnight. Because labs are graded based on whether your answers are correct, I recommend doing them *after* you have completed the coursework so you can learn from any mistakes you made on those assignments. **\*After Professor Carian grades your lab assignment, make sure to read the individualized feedback she has written for you. This is one of your main responsibilities as a student. This will prevent you from making the same mistake twice!\***

### ***Quizzes (40%):***

You will take three quizzes during the semester. The quiz questions cover material from PowerPoints/VoiceThreads, the required readings, course assignments and lab reports, and other course materials. **\*Each quiz is available for one week and can be completed at any time during the week; like other word, quizzes are due Sunday at midnight.\*** Quiz 1 is available from September 27 to October 3; quiz 2 is available from October 25 to October 31; and quiz 3 is available from December 4 to December 11. **\*Quizzes are open-note and open-book, but are also timed (one hour) and should be completed independently (on your own).\*** Quizzes are posted in the weekly folders on Blackboard.

### ***Extra Credit:***

There are two options for extra credit. Each student may only complete one. You may [create a practice quiz](#) or [apply the lesson of a podcast episode](#) for extra credit. Click on the options to learn more. The extra credit assignment is due December 11 by midnight.

## ***Professor Carian's Expectations of Students***

### ***Complete Your Own Work:***

Students may work together on course assignments, but I expect every student to complete their own work. This means that, while you may discuss problems with other students, you must write your own, original answers. Otherwise, you are plagiarizing (claiming credit for someone else's ideas or words) or cheating, which are against the Student Conduct Code. Another form of plagiarizing is taking a phrase or sentence someone else wrote (for example, from a textbook or website) and pretending it is your own. To avoid this, put the phrase or sentence in quotation marks (“...”) and say who wrote it. In addition to decreasing how much you will learn, plagiarizing and cheating will earn you a failing grade in this class. To avoid plagiarizing and cheating, always use your own words. **\*Never copy an answer from a friend, book or website, even just half a sentence.\*** Students must complete quizzes independently (meaning with no help from others).

### ***Check Your Work:***

One of your main responsibilities as a student in this class is to check your work to see what you did incorrectly. Immediately after you turn in a course assignment, you will be able to see the correct answers. Check your answers carefully against the correct answers. If you do not understand what you did wrong, go back to the VoiceThread or come to office hours. Once I have graded the lab assignment, check the individualized feedback I have written for you. (Feedback is usually available Monday evenings.) **\*Checking your work, seeing what you did wrong, and applying those lessons is the best way to learn in this class.\***

### ***Communicate with Me:***

I appreciate honesty and transparency, and I expect you to communicate with me in a timely manner (i.e. within 48 hours) about issues that will prevent you from participating fully in this class. If you are experiencing a serious problem (e.g., personal illness or illness of a child/parent/etc, childcare obstacles), please let me know in office hours, or by email ([emily.carian@csusb.edu](mailto:emily.carian@csusb.edu)), especially if the problem will affect your ability to complete your coursework. **\*Keep me in the loop! Remember: I cannot make accommodations for you if you do not communicate with me.\***

### ***Turn in Work on Time:***

I have high expectations for all students, including turning in assignments on time. As always, in the case of a serious issue that will prevent you from turning in an assignment on time, tell me as soon as possible to make arrangements. Because of the extenuating circumstances of this semester, I will accept late work with no penalty. However, I highly encourage you to keep up with the deadlines to ensure you stay on track to complete and pass the course. (This also helps keep my weekly grading load manageable.) **\*You will receive an automated email reminder on Saturday night if you have not turned in an assignment due on Sunday.\***

### ***Be Respectful:***

I expect students to contribute to a respectful and inclusive learning environment with their actions and their words. As your instructor, I will strive to do the same. It is my intent that students from all backgrounds be well-served by this course. I am committed to creating an inclusive and equitable classroom experience for all students. I hope you will help me do this, including by providing me with any suggestions or concerns.

### ***Letters of Recommendation:***

If you are considering asking me for a letter of recommendation for your application to graduate school or for a job, you should know that I can only write you a strong letter of recommendation if (1) you do well in my class (you earn a high grade, you turn work in on time, etc) and (2) we are able to get to know each other (because you come to office hours, etc). **\*When asking any professor to write a letter of recommendation, send a polite email providing important details (the program or job you are applying to, the due date, etc) well before the due date\***; professors are busy with teaching and research, and will need to schedule time to write your letter. **\*Personally, I require at least three weeks advance notice to have time to write and submit a letter.\*** I will also ask you for a draft of your personal statement so I can learn more about why you are applying to graduate school, so have that prepared in advance.

## ***Resources to Help You Succeed***

### ***Technology:***

If you need access to wifi, please find options [here](#). If you need a laptop, visit [this link](#) and click on “Laptop Checkout” (the fourth option under the “Students” column).

### ***Zoom Drop-In Office Hours:***

I highly encourage you to attend Zoom drop-in office hours (Wednesdays 4-5pm, Thursdays 1-3pm).

**\*You do not need an appointment to come to drop-in office hours; this is a time I set aside each week specifically to meet with you!\*** Just click this [link](#), which is also located on the left-hand navigation panel on our course Blackboard site (in the Resources + Help section) and at the top of this syllabus. If you need to dial in by phone:

Dial:

+1 669 219 2599 (US Toll)

+1 213 338 8477 (US Toll)

+1 720 928 9299 (US Toll)

+1 646 876 9923 (US Toll)

Meeting ID: 942 3653 3601

**\*When you come to Zoom office hours, you will be placed in a “waiting room.”\*** This is so I can meet with students one-on-one. I will let you into our “meeting room” as soon as I am free. During office hours, we can clarify anything that’s confusing, talk about new topics, work on assignments, discuss graduate school in sociology and job paths, and more! If my regular office hours do not work with your schedule, just email me ([emily.carian@csusb.edu](mailto:emily.carian@csusb.edu)) so we can find an alternative time to meet. **\*I expect every student to come to office hours at least once.\***

### ***Optional Review Sessions:***

The Friday before each quiz, I will hold an optional review session from 2-3:30pm. I will go over important concepts and review practice problems. You can ask any questions related to the material. I will post the video of the review session for any students who cannot attend. See the Course Schedule below.

### ***Email:***

In addition to communicating with me during office hours, you are welcome to contact me via email ([emily.carian@csusb.edu](mailto:emily.carian@csusb.edu)) with questions or clarifications. To save both of us time, please consider whether your question is best answered in office hours or over email. Before you email me a question, make sure you look for the answer in the syllabus and/or assignment instructions. While I make an effort to respond to student emails on the same day, I cannot promise I will respond to emails sent after 5pm until the next day.

### ***Blackboard:***

This course will make use of the Blackboard site for posting readings, turning in assignments, keeping track of grades, and making announcements. **\*Please make sure you are able to access Blackboard and check the site frequently.\*** Note that we will be using the Blackboard site for the lecture, not the Blackboard site for the lab sections.

### ***Recommended Readings:***

I have tried to minimize the number of assigned readings for this course so you can concentrate on what is important, which is understanding the concepts. If you are the type of person who benefits from readings or if you are struggling with these topics, I have posted recommended readings on

Blackboard (in the Resources + Help section). They are:

Topic	Recommended Readings
Week 3: Conceptualization and operationalization	<a href="#">What is the difference between categorical, ordinal, and numerical variables?</a> Excerpt from Schutt Chapter 4
Week 7: Descriptive statistics	Excerpt from Schutt Chapter 9
Week 8: Measures of variation	Excerpt from Schutt Chapter 9 Frankfort-Nachmias & Leon-Guerrero Chapter 5
Week 10: Probability and the Central Limit Theorem	Wheelan Chapter 5 Wheelan Chapter 8
Week 11: T-tests	Phillips Chapter 7 Excerpt from Frankfort-Nachmias & Leon-Guerrero Chapter 9
Week 12: Null and alternative hypotheses	Excerpt from Frankfort-Nachmias & Leon-Guerrero Chapter 9
Week 13: Chi-square tests of independence	Phillips Chapter 8 Excerpt from Frankfort-Nachmias & Leon-Guerrero Chapter 11
Week 14: Correlation	Wheelan Chapter 4

***Undocumented Student Support:***

All students are welcome and belong in this class regardless of their citizenship, residency, or immigration status, whether the status is documented or undocumented. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the [Undocumented Student Success Center](#) at both San Bernardino and Palm Desert Campuses (Dreamers@csusb.edu; 909.537.5937). Making use of these resources will not jeopardize your student status, your financial aid, or any other part of your residence. Please visit [here](#).

***Support for Students with Disabilities:***

If you require an accommodation to participate fully in this class, please let me know as soon as possible so we can arrange accommodations. Additionally, contact [Services for Students with Disabilities](#) at 909-537-528 (UH-183) to verify your eligibility for services and obtain necessary services.

***Basic Needs:***

If you are having trouble affording groceries, accessing sufficient food to eat every day, or if you lack a safe and stable place to live, I encourage you to contact the [Basic Needs](#) unit ([basicneeds@csusb.edu](mailto:basicneeds@csusb.edu)).

They can point you to resources like the [Obershaw DEN](#) food pantry (FO-237; [TheObershawDen@csusb.edu](mailto:TheObershawDen@csusb.edu)), short-term housing, and emergency loans.

### ***Counseling and Psychological Services (CAPS):***

College can be stressful; make sure you take care of your mental and emotional well-being. Counseling and Psychological Services (CAPS) is available for students with personal, academic, and relationship concerns. You can call them at 909-537-5040, or visit their [website](#).

### ***University Policies and Emergencies:***

You can review the University's policies on plagiarism, cheating, and course withdrawal in the [Academic Regulations and Procedures](#) section of the CSUSB Bulletin of Courses. For information regarding emergency procedures and safety guidelines, visit the [Office of Emergency Management and Business Continuity](#).

## ***Course Schedule***

### ***Notes:***

- \*Remember, all coursework is due on Sundays at midnight. For example, the coursework for week 1 is due on August 29 at midnight.\*
- This schedule is subject to change. Stay up-to-date using the most recent version of the syllabus on Blackboard, under Syllabus.

### ***Important Dates:***

- September 27 - October 3: Quiz 1 available
- October 25 - October 31: Quiz 2 available
- December 4 - December 11: Quiz 3 available
- December 11: Optional extra credit assignment due; any late work due

<b>Week 1 (8/23 - 8/29)</b>
<p><b><i>What is social research? The research process</i></b></p> <ol style="list-style-type: none"><li>1. Watch the "Introduction to SOC 3070 Video"</li><li>2. Read the syllabus</li><li>3. Take the syllabus quiz</li><li>4. Review the "Research Process VoiceThread"</li><li>5. Complete the "Practice with the Research Process Activity"</li></ol> <p>No lab this week</p>
<b>Week 2 (8/30 - 9/5)</b>
<p><b><i>How do I write a research question? Appropriate research questions</i></b></p> <ol style="list-style-type: none"><li>1. Watch the "Introduction to Research Video"</li><li>2. Review the "Research Questions VoiceThread"</li><li>3. Complete the "Practice with Research Questions Activity"</li><li>4. Complete "Lab 1: Writing a Research Question"</li></ol>



### Week 3 (9/6 - 9/12)

#### ***How can I measure the things I'm interested in? Conceptualization and operationalization***

1. Review the "Conceptualization and Operationalization VoiceThread"
2. Complete the "Practice with Conceptualization and Operationalization Activity"
3. Complete "Lab 2: Conceptualization and Operationalization"

If you feel like you need more information, there are [recommended readings](#) for this week

### Week 4 (9/13 - 9/19)

#### ***Who should I study and how can I access them? Populations, sampling, and generalizability***

1. Read "Schutt Chapter 5"
2. Review the "Sampling VoiceThread"
3. Complete the "Practice with Sampling Activity"

No lab this week

### Week 5 (9/20 - 9/26)

#### ***How do I make sure my research is ethical? Research ethics***

1. Review the "Research Ethics VoiceThread"
2. Complete the "Practice with Research Ethics Activity"
3. Complete "Lab 3: Designing an Informed Consent Form"
4. Complete "Quiz 1 Practice" and check your answers in preparation for next week's quiz

There will be a review session for quiz 1 Friday (9/24) 2-3:30pm. Professor Carian will post the recording for those who can't make it.

### Week 6 (9/27 - 10/3)

#### ***\*Quiz 1: Available from 9/27 - 10/3\****

#### ***Why and how do I do survey research? Survey research***

1. Review the "Survey Research VoiceThread"
2. Complete the "Practice with Survey Research Activity"

No lab this week

### Week 7 (10/4 - 10/10)

#### ***How can I describe my data? Descriptive statistics***

1. Review the "Descriptive Statistics VoiceThread"
2. Complete the "Practice with Descriptive Statistics Activity"
3. Complete "Lab 4: Interpreting Frequency Tables and Crosstabs"



If you feel like you need more information, there is a [recommended reading](#) for this week

### Week 8 (10/11 - 10/17)

#### *How can I describe my data? Measures of variation*

1. Review the “Measures of Variation VoiceThread”
2. Watch the “Descriptive Statistics and Measures of Variation Video”
3. Complete the “Practice with Measures of Variation Activity”
4. Complete “Lab 5: Descriptive Statistics”

If you feel like you need more information, there are [recommended readings](#) for this week

### Week 9 (10/18 - 10/24)

#### *How can I describe my data? Z-scores*

1. Review the “Z-scores VoiceThread”
2. Watch the “Z-scores Video”
3. Complete the “Practice with Z-scores Activity”
4. Complete “Lab 6: More Descriptive Statistics”
5. Complete “Quiz 2 Practice” and check your answers in preparation for next week’s quiz

There will be a review session for quiz 2 Friday (10/22) 2-3:30pm. Professor Carian will post the recording for those who can’t make it.

### Week 10 (10/25 - 10/31)

#### **\*Quiz 2: Available from 10/25 - 10/31\***

#### *What is probability? Probability and the Central Limit Theorem*

1. Review the “Probability and Central Limit Theorem VoiceThread”
2. Complete the “Fundamentals of Probability Activity”

No lab this week

If you feel like you need more information, there is a [recommended reading](#) for this week

### Week 11 (11/1 - 11/7)

#### *How can I use statistics to compare two means? T-tests*

1. Review the “T-tests VoiceThread”
2. Watch the “T-tests Video”
3. Complete the “Practice with T-tests Activity”

No lab this week

If you feel like you need more information, there are [recommended readings](#) for this week

### Week 12 (11/8 - 11/14)

#### *How can I write formal hypotheses? Null and alternative hypotheses*

1. Review the “Formal Hypotheses VoiceThread”
2. Watch the “T-tests with Formal Hypotheses Video”
3. Complete the “More Practice with T-tests Activity”
4. Complete “Lab 7: T-tests”

If you feel like you need more information, there is a [recommended reading](#) for this week

### Week 13 (11/15 - 11/21)

***How can I use statistics to compare frequencies? Chi-square tests of independence***

1. Review the “Chi-Square Test VoiceThread”
2. Watch the “Chi-Square Test Video”
3. Complete the “Practice with Chi-Square Tests Activity”
4. Complete “Lab 8: Chi-Square Tests”

If you feel like you need more information, there are [recommended readings](#) for this week

### Week 14 (11/22 - 11/28)

***How can I use statistics to quantify (measure) a relationship? Correlation***

1. Review the “Correlation VoiceThread”
2. Complete the “Practice with Correlation Activity”
3. Complete “Lab 9: Correlation”

If you feel like you need more information, there is a [recommended reading](#) for this week

### Week 15 (11/29 - 12/5)

***How and when do I use t-tests, chi-square tests, and correlation?***

1. Review the “Which Test? VoiceThread”
2. Complete the “Which Test? Activity”
3. Complete “Quiz 3 Practice” and check your answers in preparation for next week’s quiz

No lab this week

There will be a review session for quiz 3 Friday (12/3) 2-3:30pm. Professor Carian will post the recording for those who can’t make it.

### Finals Week (12/6 - 12/11)

***\*Quiz 3: Available from 12/4 - 12/11\****

***Extra credit assignment due by 12/11 at midnight***