Quantitative Research Methods

SOCI 104

Fall 2025   Section 01   In Person   3 Unit(s)   08/20/2025 to 12/08/2025   Modified 08/18/2025

👤 Contact Information

Instructor:	Carlos E. Garcia
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Office Hours:	MW 10:15-11:30 and by appointment
Class Days/Time:	MW 12:00-1:15
Classroom:	Science Building 311

💻 Course Description and Requisites

Quantitative research methods including survey research design, hypothesis formulation, questionnaire and interview design, scaling, sampling and data preparation and SPSS analysis. Completion of a class research project plus individual research reports. Required for majors.

Prerequisite: SOCI 1 or equivalent, SOCI 15 or SOCI 102 or approved Statistics course from another school; SOCI 100W, SOCI 101 and upper division standing.

Letter Graded

✳ Classroom Protocols

Classroom Protocol

1. It is the expectation that everyone in the class behave with courtesy and grace toward one another.
2. You are expected to attend all classes.
3. Students are expected to take exams at the time and date scheduled.
4. I will hold and store all exams.
5. Academic misconduct will not be tolerated.
6. No late assignments will be accepted.
7. Students are encouraged to take notes by hand, if you choose to use a computer or tablet it is expected that you will only use it for class purposes.
8. Students are expected to remove headphones, earbuds, etc. during class
9. A note on emails and grades: I will not discuss grades in any way using email. This includes giving out grades or discussions on point totals or final grades. If you would like to talk about your grades please make an appointment to meet with me.
10. Incompletes will only be given in exceptional cases.
11. I reserve the right to amend the syllabus as necessary. Any such changes will be announced to the class.
12. If circumstances arise that will affect your performance in this class please communicate them to me as soon as possible so that we can plan accordingly.

▤ Program Information

Program Learning Outcomes

1. Students will be able to think sociologically about the relationship between social structure, interaction, identities, and inequalities.
2. Students will be able to identify and explain major sociological theories and apply them to everyday life.
3. Students will be proficient in qualitative and quantitative research design, data collection and data analysis.
4. Students will be proficient in oral and written communication skills appropriate to the discipline.
5. Students will be able to practice sociology as educated and civically engaged persons.

◎ Course Goals

Course Goals and Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. CLO1 – Students will develop basic proficiency using SPSS. This includes learning to preform basic analysis and variable manipulation. Proficiency will be assessed through course assignments and the final research report.

2. CLO2 – Students will learn the language used in research methods during class lectures and assigned readings. Proficiency will be assessed in exams.
3. CLO 3 – Students will develop proficiency in the process of conceptualization and operationalization that involves the conversion of abstract concepts into measurable forms. Students will develop this skill through course lecture and small group work. Proficiency will be assessed in exams.
4. CLO4 – Students will develop proficiency in the creation of indexes. Students will learn this skill in lecture and develop it with small group work and homework. Proficiency will be assessed in exams, the research report, and the homework.
5. CLO5 – Students will develop proficiency in the creation of survey questions and the design of questionnaires. Material will be introduced in lecture and practiced in small group work. Assessment of this CLO will occur during exams.
6. CLO6 – Students will develop basic proficiency in preforming basic data analysis and presentation of data. Material will be introduced in class lecture and reinforced in small group work and homework. Proficiency will be assessed in homework, exams, and the research report.

📘 Course Materials

Textbook

Babbie, Earl. *The Basics of Social Research.* Belmont CA. Thomson Wadsworth. (Any edition will do and I encourage you to find an inexpensive copy online.)

Other technology requirements / equipment / material

1. The most recent version of SPSS available [here](#).
2. A calculator.
3. Computers can be checked out at [King library (https://library.sjsu.edu/student-computing-services)](https://library.sjsu.edu/student-computing-services)

📋 Course Requirements and Assignments

Course Requirements and Assignments

In-Class Exercises (2 points each, 20 points total)

Regularly during class we will have in-class exercises aimed at reinforcing lecture material. These exercises can only be completed in class and they cannot be made up. There will be at least 15 such exercises of which the 10 highest will be used toward your final grade.

SPSS Assignments (10 points each, 70 points total)

One of the main goals of this course is to give students basic competence using the Statistical Packet for the Social Sciences (SPSS). As such students will be required to complete several assignments throughout the semester using this program. Each assignment is worth 10 points for a total of 70 points when all assignments are completed. Keep in mind that while the assignments are not worth very many points

individually, they are still very important because future assignments (and ultimately the SPSS Research Report) depend on successfully completing even the smallest assignment. **You are very strongly encouraged to keep an archive of these assignments so that you can reference them in the future.**

SPSS Research Report (50 points)

Students will be assigned to complete a research report that combines class lecture skills with SPSS skills. The goal of the assignment is to test your ability to use SPSS. This assignment is worth 50 points.

Exams 30 points each (90 points)

Three 30 point exams are scheduled for this course. Exams will consist of multiple choice and short answer questions including analysis of tables and some hand calculations.

✔ Grading Information

Grading Information

There are 230 points possible in this course. Points will be earned through the following activities:

- 3 exams worth 30 points each, 90 points total.
- In-Class Exercises worth 2 points each, 20 points total
- 7 SPSS assignments worth 10 points each, 70 points total
- 1 research report worth 50 points

Note, unless otherwise specified, all late assignments will be penalized -10% of total point value per day late.

Determination of Grades

Grade	Percentage
A plus	96 to 100%
A	93 to 95%
A minus	90 to 92%
B plus	86 to 89 %
B	83 to 85%

Grade	Percentage
B minus	80 to 82%
C plus	76 to 79%
C	73 to 75%
C minus	70 to 72%
D plus	66 to 69%
D	63 to 65%
D minus	60 to 62%

🏛 University Policies

Per University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.

📅 Course Schedule

Date	Day	Topic	Reading	Due
August 21, 2025	Thursday		Course Introduction	
August 26, 2025	Tuesday	Lecture 1 Introduction to Sociology	No Reading	SPSS EX1 Directions Discussed
August 28, 2025	Thursday	Lecture 1 Continued		

September 2, 2025	Tuesday	Lecture 3 Paradigms, Theory, and Research	Chapter 2	SPSS EX1 Due
September 4, 2025	Thursday	Lecture 3 Continued		SPSS EX2 Directions Discussed
September 9, 2025	Tuesday	Lecture 4 Causation	No Reading	
September 11, 2025	Thursday	Lecture 5 Research Design	Chapter 4	
September 16, 2025	Tuesday	Lecture 5 Continued		SPSS EX2 Due
September 18, 2025	Thursday	Exam 1 Review		SPSS EX3 Directions Discussed
September 23, 2025	Tuesday	EXAM 1		
September 25, 2025	Thursday	Lecture 2 Human Inquiry and Science	Chapter 1	
September 30, 2025	Tuesday	Lecture 2 Continued		SPSS EX3 DUE
October 2, 2025	Thursday	Lecture 9 Quantitative Analysis	Chapter 14	SPSS EX4 Directions Distributed
October 7, 2025	Tuesday	Lecture 9 Continued	https://statisticsbyjim.com/basics/nominal-ordinal-interval-ratio-scales/ (https://statisticsbyjim.com/basics/nominal-ordinal-interval-ratio-scales/)	
October 9, 2025	Thursday	Lecture 10 Sampling	Chapter 7	
October 14, 2025	Tuesday	Lecture 10 Continued		

October 16, 2025	Thursday	Lecture 7 Indexes, Scales, and Typologies	Chapter 6	SPSS EX4 Due
October 21, 2025	Tuesday	Lecture 7 Continued		SPSS EX5 Directions Discussed
October 23, 2025	Thursday	Exam 2 Review		
October 28, 2025	Tuesday	Exam 2		
October 30, 2025	Thursday	Lecture 6 Conceptualization, Operationalization, and Measurement	Chapter 5	SPSS EX5 DUE
November 4, 2025	Tuesday	Lecture 6 Continued		SPSS EX6 Directions Discussed
November 6, 2025	Thursday	Lecture 8 Survey Research	Chapter 9	
November 11, 2025	Tuesday	Veteran's Day		
November 13, 2025	Thursday	Lecture 8 Continued		SPSS EX6 DUE
November 18, 2025	Tuesday	Lecture 11 Ethics and Politics of Research	Chapter 3	SPSS EX7 Directions Discussed
November 20, 2025	Thursday	Lecture 12 Other Methods of Social Research	Chapter 8 and 12	Research Report Directions Discussed
November 25, 2025	Tuesday	SPSS in class lab		SPSS EX 7 Due
November 27, 2025	Thursday	Thanksgiving Break		
December 2, 2025	Tuesday	SPSS in class lab		

December 4, 2025	Thursday	Review for Final Exam	SPSS Research Report Due	
December 11, 2025	Thursday	Final - 10:45 - 12:45		