San José State University
Psychology Department
STAT 115-02, Introduction to Research Methods, Spring 2025

Course and Contact Information

Instructor(s):   My Ngoc (Amy) Nguyen
Office Location: DMH 232
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Student Advising Hours: Tuesdays from 9:00am - 12:00pm in person; Wednesdays from 10:30 - 11:30am in person; Fridays 10:00am - 11:00am via Zoom only. Please email me for the Zoom link.
Class Days/Time: Tuesday and Thursday 1:30 - 2:45pm
Classroom: DMH 162
Prerequisites: STAT 095 or equivalent

Course Description

Statistical analysis at the intermediate level; chi-square, analysis of variance, correlation and regression, and topics in experimental design; use of microcomputers for statistical calculations. Notes: Intended for majors in education, nursing, personnel administration, psychology, social service and sociology, and psychology minors. Letter Graded

Course Format

Assignments will be submitted on Canvas so you will need a mobile device. If you need a working laptop, please see the Student Technology Resources section below for more information.

Canvas

Course materials such as the syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website. You are responsible for regularly checking Canvas to learn of any updates. For help with using Canvas, see Canvas Student Resources page at https://www.sjsu.edu/ecampus/software-tools/teaching-tools/canvas/student-resources/index.php.

Program Learning Outcomes (PLO)

Program learning outcomes (PLOs) are skills and knowledge that students will have achieved upon completion of the Psychology BA degree. Each course in our curriculum contributes to one or more of these PLOs. The PLOs for the Psychology BA degree are:

- PLO1 - Knowledge Base of Psychology – demonstrate familiarity with major concepts, empirical findings, theoretical perspectives, and historical trends in psychology.

- PLO2 – Research methods in Psychology – design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.

- PLO3 – Critical Thinking Skills – use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.

- PLO4 – Applications of Psychology – apply psychological principles to individual, interpersonal, group, and societal issues

- PLO5 – Values in Psychology – value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Course Learning Outcomes (CLO)

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

- CLO 1 – Understand the logic of statistical concepts
- CLO 2 – Use of appropriate statistical methods to solve quantitative problems and test hypotheses
- CLO 3 – Understand the logic and strategies of scientific research designs
- CLO 4 – Run statistical analyses using SPSS and interpret statistical information presented in SPSS output

Required Readings

Textbooks

- Tokunaga, H. T. (2018). *Fundamental Statistics for the Social and Behavioral Sciences* (2nd edition). SAGE Publications. (SJSU Library will have online access).

- Pallant, J. (2020). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS* (7th edition). Open University Press. (SJSU Library will have online access).

Suggested reading

American Psychological Association. (2019). *Publication Manual of the American Psychological Association* (7th ed.). ISBN: 978-1-4338-3217-8

Other Material Requirements

SPSS - SPSS is free to download for SJSU students. Instructions on how to download SPSS on your computer are posted on Canvas. Make sure to use your SJSU email account instead of your personal email account.

Library Liaison

Christa Bailey - email: christa.bailey@sjsu.edu

Course Requirements and Assignments

Readings: Students should read the assigned chapter of the required textbook(s) before the start of class.

Examination (CLO1, CLO2, CLO3, CLO4): Students will complete three open-book, open-note exams based on lectures and readings. Exams are indicated in the course schedule (unless stated otherwise) and will contain 10 questions with a mix of multiple-choice and open-ended response questions. Students will be given one entire class session to complete each exam. Each exam will be worth 100 points.

In-Class Assignments (CLO1, CLO2, CLO3, CLO4): Students will complete 20 in-class assignments throughout the semester as indicated in the syllabus (each worth 12.5 points). These in-class assignments vary from participation in class discussions/activities, practicing running tests in SPSS, submitting completed tasks and/or screenshots to Canvas. In-class assignments are intended to help students with running analyses in SPSS and prepare for homework assignments. **Please note that these assignments cannot be made up or turned in late. Students must attend class to turn in the in-class assignments.**

Homework (CLO1, CLO2, CLO3, CLO4): There will be a total of 5 homework assignments that will be due at 11:59pm on the days stated in the course schedule. Homeworks will range from running analyses into SPSS and submitting the output files to Canvas. It will also include an APA paragraph describing the output. To help students prepare for homeworks, in-class assignments and demonstrations will provide students with examples and step-by-step instructions on running analyses. Students will have a total of 5 homeworks with each being worth 50 points.

Round Table Presentations (CLO1, CLO2, CLO3, CLO4): Round table presentations will be worth 200 points total. The round table presentation itself will be worth 150 points with 50 points for peer-review. Presentations will take place during our final examination time. To prepare students for conducting and presenting on future research, students will prepare and create presentations on their hypothetical studies. Each presentation should be presented on a laptop or in a paper packet and take 5 minutes max. Students will need to create graphs to describe a fake output/analysis from prior homeworks and explain their interpretation of the data for their audience (**Due: 5/20/2025 @ 11:59pm**). Students will be assigned 10 peer reviews (each worth 5 points; 50 points total).

Formatting Requirements for Homeworks: All papers must be typed, double-spaced, use 1-inch margins, 12-point font, Times New Roman, and adhere to APA format (7th edition). Please double-check for grammar and spelling errors before turning in your final paper to avoid having points deducted.

Grading System

Homework (250 points)	25%
In-Class Assignments (250 points)	25%
Examinations (300 points)	30%
Round Table Presentation (200 points)	20%
Total = 1,000 points	**100%**

Final Letter Grade Scale

Grade	Points	Percentage
A	930 to 1000	93 to 100%
A minus	900 to 929	90 to 92%
B plus	860 to 899	86 to 89 %
B	830 to 859	83 to 85%
B minus	800 to 829	80 to 82%
C plus	760 to 799	76 to 79%
C	730 to 759	73 to 75%
C minus	700 to 729	70 to 72%
D plus	660 to 699	66 to 69%
D	630 to 659	63 to 65%
D minus	600 to 629	60 to 62%

This course must be passed with a C- or better as a CSU graduation requirement.

- **Extra credit opportunities:** Extra credit assignments will be made available throughout the semester and will be announced in class (20 points maximum)

- **Requests for extensions:** You may find yourself facing unanticipated, emergency situations outside of your control that impact your schooling. When these situations arise, please reach out ASAP so that I can work with you to find a successful path forward. **The first step is to request an extension, please fill out this Google Form: Request for an Extension (**https://forms.gle/pP5ijJxT2va9fVjF8**).** Please submit requests 48 hours before the due date of homework assignments. **Extensions are not guaranteed**, but I take all requests seriously and will work with you to find appropriate resources.

- **Late homework: If you did not request or receive an extension,** homework assignments that are turned in past the due date will receive a 10% penalty from your earned score per late day. **In-class assignments cannot be made up or submitted late**. However, as noted above, there will be multiple extra credit opportunities to earn back any missed points.

- **Grade changes:** Final grades will not be changed unless there was a clerical error.

- **Academic integrity:** Plagiarism, cheating, and any other forms of academic dishonesty will not be tolerated. The University Academic Integrity Policy F15-7 [pdf] requires you to be honest in all your academic coursework. If evidence of academic misconduct is found, you will receive a zero on the assignment(s) in question and I will file a report with the Office of Student Conduct and Ethical Development. Visit the Student Conduct and Ethical Development website for more information.

- **AI use policy:** You may use AI programs (e.g. ChatGPT) to help generate ideas and brainstorm. However, please be aware that the material generated by these programs may be inaccurate, incomplete, or problematic. It is your responsibility to double-check that the information that comes from these programs are accurate. Please note that you **may not submit any work generated by an AI program as your own**. If you include material generated by an AI program, it should be cited like any other reference material and paraphrased. Any plagiarism or other form of cheating will be dealt with severely under relevant SJSU policies.

University Policies

Per University Policy S16-9, 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 Syllabus Information web page (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

Additional Information

Writing Center: The SJSU Writing Center offers a variety of free resources to help students become better writers. The center offers writing resources, workshops, and one-on-one and small-group tutoring sessions. Services support writing for students in all disciplines and at all levels. The SJSU Writing Center is located in the MLK Library on the 2nd floor. Workshops and tutoring are also available through online platforms. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at sjsu.edu/writingcenter.

Academic Counseling Center for Excellence (ACCESS): ACCESS in the Social Sciences provides General Education advising, academic planning, graduation planning, mandatory freshman advising, probation advising, reinstatement and former student returning advising, career counseling, and tutoring (Statistics & Writing) for undergraduate students majoring or intending to major in any of the departments in the College of Social Sciences (CoSS). To schedule an appointment, visit the ACCESS website at https://www.sjsu.edu/access/.

Student Technology Resources: The SJSU Learn Anywhere site (https://www.sjsu.edu/learnanywhere) has a number of helpful resources for learning in an online environment, including help with Zoom and Canvas,

finding free or affordable internet and computer resources, FAQs, workshops, and more. Additionally, a wide variety of audio-visual equipment is available for student checkout from [Collaboration & Academic Technology Services](#) located in IRC Building. These items include, but are not limited to: Laptops, wifi hotspots, webcams, and wireless microphones.

Counseling and Psychological Services: The SJSU Counseling and Psychological Services is located on the corner of 7th Street and San Carlos in the new Student Wellness Center, Room 300B. Professional psychologists, social workers, and counselors are available to provide confidential consultations on issues of student mental health, campus climate, or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit the Counseling and Psychological Services website at [sjsu.edu/counseling](#), call 408-924-5910, or email [counseling.services@sjsu.edu](#).

Peer Connections: [Peer Connections](#) is your campus-wide resource for mentoring (time management, note taking, learning strategies, adjusting to college, etc.) and tutoring (including over 120 different courses and undergraduate writing). In addition, Peer Connections provides classroom support through Supplemental Instruction Leaders, Learning Assistants, Peer Mentors, and Embedded Tutors. Your instructor will announce if a Peer Educator is in your class. Peer Connections also has space for studying and offers breakfast snacks for students each day while supplies last. All services are FREE to SJSU students. For more information on services, hours, locations, or a list of current student success workshops, please visit the website at [peerconnections.sjsu.edu](#).

SJSU Cares: Students experiencing challenges meeting their basic needs including, but not limited to, access to food, shelter, and a safe space are encouraged to contact [SJSU Cares](#). Students who feel that their class performance may be affected by these challenges are encouraged to notify their professors, if comfortable doing so. Faculty members may be able to provide flexibility within the course for students working with a case manager.

STAT 115-02 / Intermediate Statistics, Spring 2025, Course Schedule
The course schedule is subject to change. Any updates will be uploaded to Canvas.

Week	Date (T/R)	Topics	In-Class Assignments	Homework Due (Before Class)	Readings (Read/ Skim before Tuesday's class)	Learning Outcomes
1	Jan. 23	Syllabus Review Downloading SPSS				
2	Jan. 28	STAT 95 Review	Assignment #1		Tokunaga - Chapter 1	CLO 1, 2, 3, & 4
	Jan. 30		Assignment #2			
3	Feb. 4	Scientific method Descriptive statistics and Hypothesis testing	Assignment #3		Tokunaga - Chapter 2, 3 & 4; Pallant - Chapters 9 & 10	CLO 1, 2, 3, & 4
	Feb. 6		Assignment #4			
4	Feb. 11	Central Tendency, level of measurement (scales), pulling descriptive statistics in SPSS	Assignment #5		Pallant - Chapters 6 & 7	CLO 1, 2, 3, & 4
	Feb. 13		Assignment #6			
5	Feb. 18	Test Review/ Exercises				
	Feb. 20	**Exam #1**				
6	Feb. 25	Correlation/ Regression	Assignment #7		Tokunaga - Chapter 13; Pallant - Chapter 11, 12, 13	CLO 1, 2, 3, & 4
	Feb. 27		Assignment #8	Homework #1		
7	Mar. 4	Chi-Square	Assignment #9		Tokunaga - Chapter 15; Pallant - Chapter 16	CLO 1, 2, 3, & 4
	Mar. 6		Assignment #10	Homework #2		

8	Mar. 11	T-test	Assignment #11		Tokunaga - Chapter 7; Pallant - Chapter 17	CLO 1, 2, 3, & 4
	Mar. 13		Assignment #12	<mark>Homework #3</mark>		
9	Mar. 18	Test Review/ Exercises	Assignment #13			CLO 1, 2, 3, & 4
	Mar. 20	Test Review/ Exercises	Assignment #14			
10	Mar. 25	**Exam #2**				
	Mar. 27	**No Class - Review exam answers**				
11	Apr. 1 - Apr. 3	**Spring Break - No class**				
12	Apr. 8	Analysis of variance (F-test)	Assignment #15		Tokunaga - Chapter 11; Pallant - Chapter 18	CLO 1, 2, 3, & 4
	Apr. 10		Assignment #16			
13	Apr. 15	Analysis of variance (F-test)	Assignment #17	<mark>Homework #4 due</mark>	Tokunaga - Chapter 12; Pallant - Chapter 19	CLO 1, 2, 3, & 4
	Apr. 17		Assignment #18			
14	Apr. 22	Analysis of variance (F-test)	Assignment #19			CLO 1, 2, 3, & 4
	Apr. 24		Assignment #20	<mark>Homework #5 due</mark>		
15	Apr. 29	Test Review/ Exercises				
	May 1	**Exam #3**				
16	May 6	Final presentation check	Work on Presentations			CLO 1, 2, 3, & 4
	May 8	Final presentation check	Work on Presentations			
Final	<mark>**Tues. May 20th from**</mark>	Round Table Presentations	● <mark>Final presentation due</mark> ● <mark>Peer reviews due</mark>			CLO 1, 2, 3, & 4

	1:00 - 3:00 pm			