

Intermediate Statistics

STAT 115

Summer 2026 Section 80 Fully Online 3 Unit(s) 07/06/2026 to 08/07/2026 Modified 05/20/2026

Contact Information

Instructor(s): My Ngoc (Amy) Nguyen

Office Location: Virtual

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Student Advising Hours: Monday and Wednesdays 8:00am - 9:00am via Zoom

Course Information

Class Days/Time: Monday and Wednesdays 9:00am - 1:30pm

Classroom: virtual classroom via Zoom (<https://sjsu.zoom.us/j/89760799874>
(<https://sjsu.zoom.us/j/89760799874>))

Course Description and Requisites

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.

Prerequisite(s): STAT 95 (or equivalent).

Grading: Letter Graded

Note(s): Intended for majors in education, nursing, personnel administration, psychology, social service and sociology, and psychology minors.

Classroom Protocols

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.

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](https://www.sjsu.edu/ecampus/software-tools/teaching-tools/canvas/student-resources/index.php) at <https://www.sjsu.edu/ecampus/software-tools/teaching-tools/canvas/student-resources/index.php>.

Program Information

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:

1. Knowledge Base of Psychology. Students will be able to demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Research Methods in Psychology. Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.
3. Critical Thinking Skills. Students will be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.
4. Applications of Psychology. Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.
Values in Psychology. Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Course Learning Outcomes (CLOs)

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

Course Materials

Textbooks

- [Tokunaga, H. T. \(2018\). *Fundamental Statistics for the Social and Behavioral Sciences* \(2nd edition\). SAGE Publications.](#) (SJSU Library has 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 has 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.

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. Each student will answer 10 exam questions with a mix of multiple choice and open-ended response. Exams will be indicated in the course schedule (unless stated otherwise). Students will be given one entire class session to complete each exam. Each exam will be worth 100 points. No use of AI tools (e.g., ChatGPT, Gemini) or Google is permitted for exams. If suspected of cheating or submitting an answer with the help of AI tools, a failing grade on the exam will be given.

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.

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. No use of AI tools (e.g., ChatGPT) is permitted for homeworks.

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. 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. Each presentation should be presented on a laptop, in a paper packet, or poster and take 5 minutes per peer (total of 25 mins). Students will also be assigned 5 peer reviews (each worth 10 points; 50 points total). Due: 08/05/26 @ 11:59pm)

✓ Grading Information

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

<i>Grade</i>	<i>Points</i>	<i>Percentage</i>
<i>A</i>	<i>930 to 1000</i>	<i>93 to 100%</i>
<i>A minus</i>	<i>900 to 929</i>	<i>90 to 92%</i>
<i>B plus</i>	<i>860 to 899</i>	<i>86 to 89 %</i>
<i>B</i>	<i>830 to 859</i>	<i>83 to 85%</i>
<i>B minus</i>	<i>800 to 829</i>	<i>80 to 82%</i>
<i>C plus</i>	<i>760 to 799</i>	<i>76 to 79%</i>
<i>C</i>	<i>730 to 759</i>	<i>73 to 75%</i>

<i>C minus</i>	700 to 729	70 to 72%
<i>D plus</i>	660 to 699	66 to 69%
<i>D</i>	630 to 659	63 to 65%
<i>D minus</i>	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)** (<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 not use AI (e.g., Google, ChatGPT, Gemini) to study or help you on the exams. You can use AI programs (e.g. ChatGPT) to help generate ideas and brainstorm for your Round Table presentations. 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 and paraphrase/quote it, 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.

Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/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) (<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

STAT 115-80 / Intermediate Statistics,
 Summer 2026 Course Schedule linked
 here:

https://docs.google.com/document/d/1q_LxUivijurjv2vWqWkGVUrjGkUN9sFYLvNc1Jce0Cw/edit?usp=sharing
 (https://docs.google.com/document/d/1q_LxUivijurjv2vWqWkGVUrjGkUN9sFYLvNc1Jce0Cw/edit?usp=sharing).

Week	Date (MW)	Topics	In-Class Assignments	Homework Due by 11:59pm	Readings (Read/Skim before Monday's class)	Learning Outcomes
1	Mon., Jul. 6	Syllabus Review Downloading SPSS PSYC 18+ STAT 95 Review	Assignment #1 Assignment #2 Assignment #3		Tokunaga - Chapter 1	CLO 1, 2, 3, & 4
	Wed., Jul. 8	Data coding; Descriptive statistics and central tendency, level of measurement (scales), Exam #1 Review	Assignment #4 Assignment #5 Assignment #6		Tokunaga - Chapter 2, 3 & 4; Pallant - Chapters 9 & 10 Pallant - Chapters 6 & 7	

2	Mon, Jul. 13	Exam #1			CLO 1, 2, 3, & 4	
		Correlation	Assignment #7 Assignment #8	Homework #1 due		Tokunaga - Chapter 13; Pallant - Chapter 11
	Wed, Jul. 15	Chi-Square	Assignment #9 Assignment #10	Homework #2 due		Tokunaga - Chapter 15; Pallant - Chapter 16
		T-test	Assignment #11 Assignment #12	Homework #3 due		Tokunaga - Chapter 7; Pallant - Chapter 17
		Exam #2 Review	Assignment #13 Assignment #14			
3	Mon, Jul. 20	Exam #2			CLO 1, 2, 3, & 4	
	Wed, Jul. 22	ANOVA part 1	Assignment #15 Assignment #16	Homework #4 due		Tokunaga - Chapter 11; Pallant - Chapter 18
		ANOVA part 2	Assignment #17 Assignment #18			Tokunaga - Chapter 11; Pallant - Chapter 18
4	Mon, Jul. 27	ANOVA part 3	Assignment #19 Assignment #20	Homework #5 due	Tokunaga - Chapter 12; Pallant - Chapter 19	CLO 1, 2, 3, & 4
		Exam #3 Review				
	Wed, Jul. 29	Exam #3				
5	Mon, Aug. 3	Work on final presentations/Office hours/Presentation check-ins			CLO 1, 2, 3, & 4	
	Wed, Aug. 5	Round Table Presentations		Posters due on Canvas before class @ 9:00am.		