

Advanced Research Methods in Psychology

PSYC 118

Summer 2026 Section 01 In Person 3 Unit(s) 07/06/2026 to 08/07/2026 Modified 05/26/2026

Contact Information

Instructor	Ángel Villicaña, M.S.
Email/Contact	Angel.villicana@sjsu.edu
Office Hours	Mondays, 4pm - 5pm or by appointment (DMH #230 or request a Zoom link)

Course Information

Class Date/Time	Date/Time	Location
PSYC 118-01 (lecture)	Monday through Thursday, 12:00pm - 2:00pm	TBD
PSYC 118-02 (lab)	Tuesdays and Thursdays, 2:15pm - 5:00pm	TBD

Course Description and Requisites

Descriptive, correlational, quasi-experimental, and experimental approaches: design, methodology, and analysis. Experience designing, conducting, analyzing, and presenting (verbal and written) research findings. Topics include: hypothesis testing, validity, reliability, scales of measurement, questionnaire development, power, statistical significance, and effect size.

Prerequisite: Lower division GE complete; STAT 95, PSYC 18, PSYC 100W with a "C" or better (or departmental approval), Upper division standing, Psychology or Behavioral Science majors only.

Letter Graded

Classroom Protocols

Communication

Please reach out whenever you have questions, concerns, or curiosities. You may contact me via email (angel.villicana@sjsu.edu) or Canvas messaging. Please include the class and section number in the subject line. I aim to respond within 1–2 business days. Messages sent over the weekend may not receive a response until Monday. Out of respect for your own time, I do not expect a response outside of these hours as well.

I encourage you all to reach out often and early. Your presence and contributions to this class matter. Please let me know if there is anything I can do to help improve your learning experience.

Office Hours

My regular office hours are Mondays from 4pm - 5pm in DMH #230. I am also available by appointment, either in person or via Zoom (depending on your schedules). I encourage you to use office hours to discuss course material, assignments, or any questions about your progress in the class.

Respectful Learning Environment

We strive for a classroom where all students feel safe, supported, and heard. Please:

- Listen when others are speaking and contribute constructively.
- Avoid side conversations during class and labs.
- Respect diverse perspectives and experiences.

Attendance

According to University Policy F15-12, "Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein and active participation is frequently essential to ensure maximum benefit to all class members. In some cases, attendance is fundamental to course objectives; for example, students may be required to interact with others in the class. Attendance is the responsibility of the student. Participation may be used as a criterion for grading when the parameters and their evaluation are clearly defined in the course syllabus and the percentage of the overall grade is stated." Please see the assignments section in the syllabus to see how participation is scored in this class.

Credit Hour Definition

To be successful in courses at SJSU, it is expected that students will spend a minimum of forty-five hours for each unit of credit (a 3-unit class would be approximately 9 hours per week), including preparing for class, participating in course activities, and completing assignments. More details about student workload can be found in University Policy (<http://www.sjsu.edu/senate/docs/S12-3.pdf>)

Accessibility & Accommodations

San José State University is committed to providing equitable access to learning for all students. The [Accessible Education Center \(AEC\)](https://www.sjsu.edu/aec/index.php) (<https://www.sjsu.edu/aec/index.php>) will notify me of students with documented accommodations. However, it is your responsibility to meet with me if you would like to discuss how your accommodations may apply in this course, especially since there are no traditional exams. Please reach out early in the semester so we can plan together and ensure your needs are met.

AI Policy

Generative artificial intelligence tools—software that creates new text, images, computer code, audio, video, and other content—are widely available. Well-known examples include ChatGPT (text) and DALL·E (images). This policy governs all such tools, including those released during our semester together.

- You may use generative AI tools to brainstorm initial ideas, create outlines, or revise reading notes for assignments in this course.
- You may not use AI tools to write any assignments for you.
- If you use AI on assignments, you must document and credit the tool. Cite the tool using APA format (as software), and include a brief (25–100 word) description of how you used it. Add this paragraph at the end of your text, before the References list; it is not included in the word count.

Important considerations:

- AI tools are trained on limited, pre-existing datasets that may be out-of-date or include copyrighted material.
- Reliance on AI can result in plagiarism, copyright violations, or inaccurate content.
- You are responsible for ensuring that all submitted work reflects your own understanding, is accurate, and maintains academic integrity.
- Unauthorized or improper use of AI will be addressed under the SJSU Academic Integrity Policy.
- Consequences for a first offense may range in severity; repeated offenses may result in more serious academic review.

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:

1. Understand how scientific methods are used in psychological research.
2. Summarize the differences between different types of research designs used in psychological research.

3. Determine the advantages and disadvantages of specific research methods for different situations.
4. Evaluate whether research participants are treated ethically and understand the importance of ethical considerations in research.
5. Design and conduct a psychological experiment, analyze data, and interpret results.
6. Communicate research findings effectively through written reports and oral presentations.

Course Materials

Required Readings and Class Materials

Textbook

No textbook purchase is required for this class. Instead, we will be using an Open-source textbook for this course, made available on Canvas as a PDF and direct link: [Cuttler, C., Jhangiani, R. S., & Leighton, D. C. \(2019\). Research Methods in Psychology; 4th American Edition. \(https://kpu.pressbooks.pub/psychmethods4e/\)](#)

Computer Access

Students will need access to the internet and the online Canvas site to submit assignments. Submission of assignments may occur during class periods with an electronic device that can access the Canvas site (phone, tablet, or laptop). Students will have access to a desktop computer during lab periods. If you do not have a laptop but would like one, you may borrow one from the [Student Computing Center in the SJSU library \(https://library.sjsu.edu/student-computing-services\)](#).

SPSS

We will be using [SPSS \(https://www.sjsu.edu/it/services/support/desktop/instructions.php\)](#) (advanced statistical software) for data collection, management, and analysis and preparation of research report. This tool is free for SJSU students; Reach out to IT services for any tech-related issues ([https://isupport.sjsu.edu/Helpdesk](#)).

Qualtrics

To complete your individual research projects, you will be required to create and collect data using an online survey via [Qualtrics \(https://www.sjsu.edu/it/research/applications/qualtrics.php\)](#) (advanced survey tool). This tool is free to access for SJSU students; Reach out to [IT services \(https://isupport.sjsu.edu/Helpdesk\)](#) for any tech-related issues.

Recommended Texts

These are not required for you to purchase, but will be useful throughout the course. Specific excerpts and resources will be linked and posted on Canvas regularly. If you have a resource you'd like to share and add to the class, please message me privately and ensure it is in a shareable format (e.g., not a private file or a broken link).

- APA Style website: <https://apastyle.apa.org/>
- APA Style Tutorial at <https://extras.apa.org/apastyle/basics-7e/>
- Purdue Owl APA Style Resource at <https://owl.purdue.edu/>
- American Psychological Association (2020). Publication Manual of the American Psychological Association (7th Ed.).

- Condensed version of the American Psychological Association (2020). Publication Manual of the American Psychological Association (7th Ed.)

Course Requirements and Assignments

Your grade in this course reflects steady engagement, skill development, and demonstrating your ability to apply research methods in psychology. Individually, you will be asked to design and progressively draft key components of the final paper. Unless otherwise noted, all assignments are submitted via Canvas. Assignments will be evaluated based on responsiveness to prompts, accurate application of research methods, writing quality, and proper use of APA style when applicable. Detailed rubrics for each assignment are provided on Canvas.

Participation Activities (10%)

Active participation is essential for your learning and for completing your final project. Participation will be assessed based on completion of in-class Canvas activities and active collaboration during peer-based tasks (10 points each week). Given the nature of these activities, you must be present in class to earn participation credit.

Submission:

- Activities are completed in-lecture with final responses uploaded to Canvas by the end of the week (Fridays, 11:59 PM).
- *Maximum* 10 points per week

Grading basis: Participation assignments are graded on effort, engagement, and completion.

Quizzes (20%)

To assess your content mastery, there will be a quiz due at the end of each week (20 points each). Each quiz is based off of the corresponding week's readings and lecture content. You are allowed to reference your personal notes and reading materials, but you may not use other websites or AI tools to complete answers. Your responses are saved and there is no time limit to complete these. For instance, you may take a break during the quiz and complete as a later time, just as long as your final response is recorded before the deadline.

Submission: Completed on canvas, Quizzes open at the start of the week and are due by the end of the same week.

Grading basis: Quizzes are graded on accuracy and completion. There are 3 total attempts per quiz, highest score is kept. Reach out if you suspect an error or typo.

Lab Activities (20%)

There are 5 lab activities (20 points each) designed to develop key research skills, including APA style, ethics, data handling, and peer feedback. Lab activities may include short response papers or brief data analysis write-ups (250–500 words).

Final Presentation: The fifth and last lab will be completed through an **in-class final presentation** and submission of research project materials. Presentations will be evaluated on organization, clarity, integration of findings, and delivery (20 points).

Submission: Upload your complete responses and research materials (if applicable) to Canvas by the assigned due dates.

Grading basis: Lab activities are graded on accuracy, application of research methods, clarity of writing, and APA style. Detailed rubrics are posted on Canvas.

Final Research Paper (50%)

This course satisfies the SJSU *culminating experience* requirement through an individual written research report. Four major milestones guide your project from drafted components to a final edited paper, covering the majors sections found in a research paper: Introduction, Methods, Results, and Discussion (50 points each).

Milestones	Length	Due Date	Points
M1: Introduction	2-3 pages (≈500-750 words)	Week 1 (Fri, July 10)	50 pts
M2: Methods	2-4 pages (≈500-1000 words)	Week 2 (Fri, July 17)	50 pts
M3: Results	2-4 pages (≈500-1000 words, incl. tables/figures)	Week 3 (Fri, July 24)	50 pts
M4: Discussion	2-3 pages (≈500-750 words)	Week 4 (Fri, July 31)	50 pts
M5: Final Paper	8-10 pages (≈2,000-2,500 words)	Week 5 (Fri, Aug 7)	50 pts

The fifth, and final milestone submission represents the finalized research paper written fully in APA 7th format (50 points). The finalized report is an 8-10 page APA-style paper (approx. 2,000–2,500 words, not including references and appendices) that integrates completely individual work, revises earlier milestones, and demonstrates a comprehensive understanding of the research process.

Submission: Complete by the hard deadline of Friday, August 7th 2026 by 11:59pm on Canvas.

Grading: The final report will be evaluated on completeness, integration of feedback, writing quality, accuracy of research methods, and adherence to APA style. Detailed rubrics are posted on Canvas.

✓ Grading Information

You will be assessed across four criteria in the course, culminating to a final research paper (participation, lab activities, milestones, and quizzes). Please read the information below to understand the late work policy, extra credit opportunities, as well as grading scale & breakdown.

Late Work & Grace Period

Individual writing assignments, such as the milestone drafts and lab activities, may be submitted up to 48 hours after the deadline with no penalty. After 48 hours, a 10% deduction per day applies (max 10 days). This **does not apply** to the final research paper.

Please reach out early or as soon as possible if you anticipate difficulty meeting a deadline. Communication before the due date can often prevent penalties and allow for extensions when needed.

Extra Credit (2%)

Opportunities may be provided for students up to two percent of the total course grade. These may range from one-page literature reviews, video essays, or research event summaries submitted. Submission portals with further instructions are provided on Canvas.

Grading Scale

Letter Grade	Percent
A plus	97 or higher
A	93 to 96.99
A minus	90 to 92.99
B plus	87 to 89.99
B	83 to 86.99
B minus	80 to 82.99
C plus	77 to 79.99
C	73 to 76.99
C minus	70 to 72.99

D plus	67 to 69.99
D	63 to 66.99
D minus	60 to 62.99
F	59 or below

Breakdown

Assignment Category	% of Grade	Points
Participation Activities	10%	50 points (5 weekly activities x 10 points)
Quizzes	20%	100 points (5 weekly quizzes x 20 points each)
Lab Activities	20%	100 points (5 labs - includes final presentation x 20 points each)
Final Research Report	50%	250 points (across all four drafts + finalized version x 50 points each)
Total	100%	500 points

University 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

In the next five weeks, we will be covering multiple aspects of methodological research in psychology while building on your research project piece by piece. Please see below for the full class schedule (subject to change with Canvas notification).

Date	Monday	Tuesday	Wednesday	Thursday	Assignments Due
7/6-7/9	<p>Lecture: Introducing Psychology as a Science</p> <p>Readings: Chapter 1. The Science of Psychology</p>	<p>Lecture: Current Research Practices</p> <p>Lab: Topic Deep-Dive</p> <p>Readings: Chapter 2. Overview of the Scientific Method</p>	<p>Lecture: Research Ethics - Then & Now</p> <p>Readings: Chapter 3. Research Ethics</p>	<p>Lecture: Testable Questions & Variables</p> <p>Lab: Project Proposal</p> <p>Readings: Find readings for your M1: Introduction Draft</p>	<p>Lab 1</p> <p>Quiz 1</p> <p>M1: Introduction</p> <p>Friday, 7/10, by 11:59pm</p>
7/13-7/16	<p>Lecture: From Observation to Measurement</p> <p>Readings: Chapter 4. Psychological Measurement</p>	<p>Lecture: Sample Types</p> <p>Lab: Translating Research Questions to Analyses</p> <p>Readings: Chapter 10. Single-Subject Research</p>	<p>Lecture: Experimental vs Non-experimental Studies</p> <p>Readings: Chapter 5. Experimental Research</p> <p>Chapter 6. Non-Experimental Research</p>	<p>Lecture: Survey Study Designs</p> <p>Lab: Build Your Own Survey</p> <p>Readings: Chapter 7. Survey Research</p>	<p>Lab 2</p> <p>Quiz 2</p> <p>M2: Methods Draft Friday, 7/17, by 11:59pm</p>
7/20-7/23	<p>Lecture: A 2x2 ANOVA Preview</p> <p>Readings: Chapter 9. Factorial Designs</p>	<p>Lecture: Variables & Patterns</p> <p>Lab: Descriptive Statistics Practice</p> <p>Readings: Chapter 12. Descriptive Statistics</p>	<p>Lecture: NHST</p> <p>Readings: Chapter. 13 Inferential Statistics</p>	<p>Lecture: Choosing the Correct Test</p> <p>Lab: Running Analyses Using SPSS</p> <p>Readings: Chapter. 13 Inferential Statistics (continued)</p>	<p>Lab 3</p> <p>Quiz 3</p> <p>M3: Results Draft</p> <p>Friday, 7/24, by 11:59pm</p>

Date	Monday	Tuesday	Wednesday	Thursday	Assignments Due
7/27-7/30	<p>Lecture: Interpreting SPSS Results</p> <p>Readings: Chapter. 13 Inferential Statistics (continued)</p>	<p>Lecture: Summarize Your Research</p> <p>Lab: Interpreting SPSS Results</p> <p>Readings: Assigned articles</p>	<p>Lecture: Theoretical vs. Practical Implications</p> <p>Readings: Assigned articles</p>	<p>Lecture: Identifying Limitations & Future Directions</p> <p>Lab: Discussion Writing Practice</p> <p>Readings: Assigned articles</p>	<p>Lab 4</p> <p>Quiz 4</p> <p>M4: Discussion Draft</p> <p>Friday, 7/31, by 11:59pm</p>
8/3-8/6	<p>Lecture: Connections to Current Research</p> <p>Readings: Chapter 11. Presenting Your Research & assigned articles</p>	<p>Lecture: Presenting Findings in APA</p> <p>Lab: Finalizing Research Project</p> <p>Readings: Chapter 11. Presenting Your Research</p>	<p>Lecture: Visualize Your Findings</p> <p>Readings: Review psychology resources</p>	<p>Lecture: Reporting Findings in APA</p> <p>Lab: Research Project Presentations</p> <p>Readings: Review psychology resources</p>	<p>Lab 5</p> <p>Quiz 5</p> <p>M5: Final Research Paper (all drafts revised)</p> <p>Friday, 8/7, by 11:59pm</p>