

Advanced Research Methods in Psychology

PSYC 118

Fall 2025 Sections 10, 11, 12 In Person 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 08/24/2025

Contact Information

Instructor	Ángel Villicaña, M.S.
Email	Angel.villicana@sjsu.edu
Office Hours	Fridays, 2:00pm - 3:30pm or by appointment (DMH #230 or Zoom)
Class Days/Time (In-person)	PSYC 118-10 (lec): Monday/Wednesday, 9:00am - 9:50am in DMH #208 PSYC 118-11 (lab): Monday, 10:15am - 12:15pm in DMH #236 PSYC 118-12 (lab): Wednesday, 10:15am - 12:15pm in DMH #236

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.

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 Fridays from 2pm - 3:30pm 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.

Accessibility & Accommodations

San José State University is committed to providing equitable access to learning for all students. The Accessible Education Center (AEC) 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 drafts** for assignments in this course.
- You may **not use AI tools to write your 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 textbook

We will be using an Open-source textbook for this course, made available on Canvas and linked here: [Cuttler, C., Jhangiani, R. S., & Leighton, D. C. \(2019\). Research Methods in Psychology, 4th American Edition.](#)

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. If there is 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 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 the demonstrating your ability to apply research methods in psychology. Assignments are designed to build progressively toward the final research project. 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 & Weekly Activities (15%)

Participation grades reflect active engagement in lectures, labs, and Canvas via short, low-stakes activities, such as:

- Short written reflections (150–250 words)
- In-class polls or knowledge checks
- Small group problem-solving tasks
- Reflections on peer or instructor feedback

Expectations for earning participation credit: Students are expected to attend all class and lab meetings, as they are responsible for the material discussed in class. Active participation is essential for your learning and for supporting your peers' learning. Participation will be assessed based on contributions to discussions, completion of in-class or Canvas activities, and collaboration with peers. Given the nature of these activities, you must be present in class to earn participation credit. Credit is based on effort and completion, not perfection.

Guidelines:

- Completed in-class or submitted via Canvas by Friday 11:59 PM
- Maximum 3 points per assignment
- To allow flexibility, the two lowest participation grades will be dropped when calculating the final participation score.
- Assignments will vary in format but will generally involve writing about 150–250 words
- Across the semester, there will be approximately 15 participation assignments (one most weeks)

Grading basis: Participation assignments are graded on effort, engagement, and completion. Detailed rubrics are posted on Canvas.

Lab Activities (20%)

There are five lab activities (12 points each) designed to develop key research skills, including APA style, ethics, data handling, and peer feedback. Lab activities may include:

- Short response papers (300–500 words)
- Annotated bibliographies
- Brief data analysis write-ups (250–500 words)

Submission: Canvas, by the assigned due dates (typically every three weeks on Fridays) to allow time for reflection and completion after lab sessions.

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

Milestone Assignments (35%) - 105 pts total

Four major milestones guide your project from concept to results. Milestones may include a mix of individual and group components. Clear deadlines and submission instructions are provided:

Scheduled

Milestone	Format	Length	Due Date	Points	% of Milestone Total
M1: Topic Proposal & Rationale	Group	2–3 pages (≈800–1,000 words)	Week 4 (Fri, Sep 12)	15 pts	15%
M2: Literature Review & Hypotheses	Individual	4–5 pages (≈1,200–1,500 words)	Week 7 (Fri, Oct 3)	30 pts	30%
M3: Methods & Planned Analyses	Group	3–4 pages (≈1,000–1,200 words)	Week 11 (Fri, Nov 7)	25 pts	25%
M4: Results	Group	3–4 pages (≈1,000–1,200 words, incl. tables/figures)	Week 14 (Fri, Nov 21)	30 pts	30%

Grading basis: Milestones are graded on clarity, accuracy in applying research methods, depth of analysis, responsiveness to feedback, and APA style. Group milestones assume equitable participation; students are responsible for communicating with teammates and meeting deadlines to ensure all group members can contribute effectively. Detailed rubrics are posted on Canvas.

Final Presentation (10%)

A 15–20 minute group, in-class presentation sharing your research findings. Presentations will be evaluated on organization, clarity, integration of findings, and delivery.

Submission: Slides (10–15) must be submitted on Canvas before the scheduled presentation date.

Scheduled: Week 16 (Dec 1 & 3) - Sign-up sheet will be announced and posted on Canvas.

Grading basis: Presentations are graded on organization, clarity, integration of research findings, delivery, and evidence of individual contributions. Detailed rubrics are posted on Canvas.

Final Research Report (20%)

This course satisfies the SJSU *culminating experience* requirement through a final group research presentation and an individual written research report. The report is a 10–12 page APA-style paper (approx. 3,000–3,600 words, excluding references and appendices) that integrates group and individual work, revises earlier milestones, and demonstrates a comprehensive understanding of the research process.

Submission: Monday, December 15, 10:30 AM 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

Grading Breakdown

Assignment Category	% of Grade	Points
Participation	15%	45 pts (15 weeks × 3 pts each, lowest 2 dropped)
Lab Activities (5 total)	20%	60 pts (5 labs × 12 pts each)
Milestones (4 total)	35%	105 pts (across M1, 2, 3, 4)
Final Presentation	10%	30 pts (group grade, with individual contribution checks)
Final Research Report	20%	60 pts (revised group + individual sections)
Total	100%	300 pts

Grading Scale

Letter Grade	Percent
A+	97 or higher
A	93 to 96.99
A-	90 to 92.99
B+	87 to 89.99
B	83 to 86.99
B-	80 to 82.99
C+	77 to 79.99
C	73 to 76.99
C-	70 to 72.99
D+	67 to 69.99
D	63 to 66.99
D-	60 to 62.99
F	<60

Late Work

All individual assignments may be submitted up to 48 hours after the deadline with no penalty. After 48 hours, an automatic 10% deduction per day applies. However, please keep in mind that delays on group-related assignments may delay the success and progress of your group.

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 alternative arrangements when appropriate.

Extra Credit – 2%

Opportunities may be provided for students up to two percentage points 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 will be provided on Canvas.

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

PSYC 118 – Adv. Research Methods in Psychology, Fall 2025 Schedule

This schedule is subject to change with fair notice. You will be notified via Canvas if syllabus updates are made. Readings are based on the open-source textbooks we will be using for this class.

Week & Date	Lecture & Lab Topics	Readings (Chapter: Sections)	Due Dates
1 – Aug 20	Course introduction; overview of research methods in psychology	Ch. I: 1–6	—
2 – Aug 25 & 27	Research ethics; APA style basics; lab orientation	Ch. III: 15–18; Ch. XI: 48	Lab 1 Fri, Aug 29
3 – Sep 3 (<i>Mon holiday</i>)	Developing research questions; hypothesis formulation	Ch. II: 7–10	—
4 – Sep 8 & 10	Topic proposal development; forming project groups	Ch. II: 8–10; Ch. XI: 48–49	M1 Topic Proposal Fri, Sep 12

5 – Sep 15 & 17	Literature search strategies; evaluating sources; lab on lit review skills	—	Lab 2 Fri, Sep 19
6 – Sep 22 & 24	Writing literature reviews; peer feedback session	—	Lit Review Draft Check-in Fri, Sep 26
7 – Sep 29 & Oct 1	Hypothesis refinement; preparing for the individual milestone	Ch. II: 10–13	M2 Lit Review & Hypotheses Fri, Oct 3
8 – Oct 6 & 8	Research design overview; lab on methods preparation	Ch. V: 23–27	Lab 3 Fri, Oct 10
9 – Oct 13 & 15	Measurement and scales; survey and observational design	Ch. IV: 19–22	Methods Draft Check-in Fri, Oct 17
10 – Oct 20 & 22	Data analysis foundations	Ch. VI: 28–33	Lab 4 Fri, Oct 24
11 – Oct 27 & 29	Planned analyses; power analysis; lab on data handling	Ch. XII: 52–56	M3 Methods & Planned Analyses – Fri, Nov 7
12 – Nov 3 & 5	Interpreting statistical results	Ch. XIII: 57–61; Ch. II: 13	—
13 – Nov 10 & 12	Writing results and discussion sections; lab on interpretation	Ch. XI: 49–50	Lab 5 – Fri, Nov 14
14 – Nov 17 & 19	Finalizing results and discussion sections	—	M4 Results – Fri, Nov 21

15 – Nov 24 <i>(Mon only)</i>	Thanksgiving week - Presentation skills and practice	Ch. XI: 50	Presentation Slides Draft – Tue, Nov 25
16 – Dec 1 & 3	Final project presentations	—	Final Presentations – scheduled in class
17 – Dec 8	Makeup presentations; course wrap-up	—	—
Finals Week	—	—	Final Research Report – Mon, Dec 15, 10:30 AM due on Canvas