SJSU SAN JOSÉ STATE UNIVERSITY

College of Social Sciences · Psychology

Advanced Research Methods in Psychology Section 80 PSYC 118

Summer 2025   Fully Online   3 Unit(s)   06/02/2025 to 08/08/2025   Modified 05/27/2025

👤 Contact Information

Instructor: **Dr. Mark Van Selst**

Office: DMH 314 (but use same zoom for office hours)

Phone: (408) 924-5674 (may forward to cell)

E-Mail: **Mark.VanSelst@SJSU.edu** <--- PREFERRED

Classroom: [Online](#) (zoom)

Class format: [Online](#) + SJSU Canvas (deadlines, details, etc)

🕐 Course Information

You have already taken a lower division research methods course, this course will cover some of the same content but in more depth and with more context from your subsequent coursework.   There will be a component on active laboratory experiences, a component on APA writing of the Method and Results sections of an experimental paper. You will design, execute and report on an experiment of your choosing performed under my guidance.

Lecture + Lab

9 AM-10:35 AM, 10:40 AM-12:15
9:00 AM to 12:15 PM, Online

Classroom:	[Online](#)

Class Days/Time:	Monday & Wednesdays 9:00 AM – 10:35 AM

Lab Hours:	Monday & Wednesdays 10:40 AM – 12:15 PM

🖵 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

Social Expectations: you are adults, I am human

- Etiquette
- Disability / Modifications
- If you qualify, I encourage you to register with the AEC [Accessible Education Center] now, even if you do not currently think that you will use it
- There are advantages (Karmic and early registration) to be a note-taker
- Exam Rescheduling (exam early)

Academic Expectations:

- Lateness is bad (be sure to keep current work on time)
- Minimum late penalty = -1/2 point (i.e., 0.5% of total grade)
- Plagiarism is worse (my recommended sanction is an F in the course and expulsion from the university)
- Poor grammar, illegible text, or unintelligible writing will hurt your grade
- If "life happens" do let me know as soon as possible – let's see what is reasonable and fair to everyone in the class.

☰ 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 Goals

Knowledge Base of Psychology: Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Research Methods in Psychology: Students will understand basic methodological approaches used in cognitive psychology, including research design, analysis, and interpretation.

Critical Thinking Skills in Psychology: Students will understand and be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.

Application of Psychology: Students will understand and be able to apply psychological principles to individual, interpersonal, group, and societal issues.

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📊 Course Learning Outcomes (CLOs)

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📘 Course Materials

Required Textbook

Cozby & Bates

Methods in Behavioral Research

ISBN: 1264556276

Recommended Text

- *Publication Manual of the American Psychological Association, 7th edition* (2019). APA: Washington, DC

:≡ Course Requirements and Assignments

Category	Value
Lab Activities (6)	9.5
Class Project (results & method)	8.5
Individual Research Project	20.0
Activities (9)	7.0
Exams (4 midterms)	46.0
Quizzes (11)	9.0

lab: Zoom (.5, June 3), Graphing (2, June 3), Ethics (1, June 10), Library (2.5, June 24), Observation (2.5, June 26), External (1, Aug 7)

Class Project: Participation (.5), Data Analysis (1), Results Submission (2), Methods (2), Method Meeting (1), Method Redo (2)

Individual Project: Topic (1), Background (2), Design (2), Materials (1), Data Collection (1), Analysis (2), Presentation Materials (1), Presentation (2), Other Evaluation I (1), Other Evaluation II (1), Self-Evaluation (1), Full APA write-up (5)

Activities: Reflections (.5), Midterm Prep (1), Methods (.5), Reliability (1), Questionaires (.5), Latin Square (1), Chi-Square (1) [TEAM PROJECT], Case Study (1), Houses (1)

Exams: Chapter 1-4 (10), 5-8 (10), 9-12 (13), 13-14 (13)

Quizes: Intro (.5), week 2(.5), ethics (.5), design (.5), observation (1), measurement (1), running experiments (1), design (1), case studies (1), statistics (1)

✔ Grading Information

The course is out of 100.

90-92.5 is an A-; 97.5+ is an A+

80-82.5 is a B-; 87.5+ is a B+

70-72.5 is a C-; 77.5+ is a C+

60-62.5 is a D-; 67.5+ is a D

Below 60 is an F

Criteria

Lab Activities (largely in class): 9.5%

Class Project (experience producing a Method and Results section): 8.5%

Individual Project (individual research project, must be experimental): 20%

Activities (mostly individual, mostly out of class): 7%

Exams: Four **Midterms** (46%), Eleven **Quizes** (9%)

🏛 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

see CANVAS for up to date content

	Tuesday	Thursday (Friday)

June 3,5	Chapter 1 (INTRO) Zoom (lab), Graphing (lab)	Chapter 2 (Hypotheses) Reflections (activity) Introduction (quiz)
June 10, 12	Chapter 2 (Hypotheses) Chapter 3 (Ethics) Ethics (lab)	Library (lab) methods (activity) review (quiz) ethics (quiz)
June 17, 19	Chapter 4 (Fundamentals of Research) participate (class experiment)	observation (lab) midterm 1 prep (activity) MIDTERM 1 (C1-C4) (exam)
June 24, 26	Chapter 5 (Measurement) data analysis (class experiment)	Early topic (individual) reliability (activity) design (quiz) observation I (quiz) running experiments (quiz)
July 1, 3	Chapter 6 (Observation) Chapter 7 (Surveys) Results (class experiment)	Sources (individual) questionaires (activity) measurement (quiz) observation II (quiz)
July 8, 10	Chapter 8 (Experimental Design) Methods (class experiment[9th]) Design (individual)	Method Meeting (class experiment), Method Resubmit (class experiment) latin square (activity) MIDTERM 2 (C5-C8) (exam)

July 15, 17	Chapter 9 (Conducting Research)	Chapter 10 (Complex Experiments)
	Materials (individual)	data collection (individual)
	data collection (individual)	chi-square (activity) [*pairs*]
July 22, 24	Chapter 11 (Single Case/Quasi-Experiments)	Chapter 12 (Description & Correlation)
	data analysis (individual)	data analysis (individual)
		case study (activity)
		MIDTERM 3 (C9-C12) (exam)
July 29, 31	Chapter 13 (Statistical Inference)	Chapter 14 (Generalizability)
		Houses (activity)
Aug 5, 7	Presentation Materials (individual)	other-evaluation (individual)
	Oral Presentation (individual)	external (lab)
	other evaluation (individual)	full APA write-up (individual)
	self-evaluation (individual)	case studies (quiz)
	design (quiz)	statistics (quiz)
		MIDTERM 1 (C13-C14) (exam)