

Advanced Research Methods in Psychology PSYC 118

Summer 2026 Section 80 Fully Online 3 Unit(s) 06/01/2026 to 07/02/2026 Modified 05/31/2026

Course Information

Lecture

FULLY ASYNCHRONOUS

Zoom Information

Join from PC, Mac, Linux, iOS or Android: <https://sjsu.zoom.us/j/8563248275>
(<https://sjsu.zoom.us/j/8563248275>).

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

Use of Generative AI in This Course

The use of generative AI tools is **strongly discouraged** and only permitted in circumstances **explicitly stated by the instructor**.

Usage of embedded AI tools (Grammarly, AI Chrome Extensions, etc.) are not permitted. **It is your responsibility to ensure that any work submitted as part of this class is not AI generated, and it is your responsibility to ensure that no embedded AI tools are used as part of the work submitted. No credit will be given for AI generated work in any submissions and will need to be**

resubmitted. If you need assistance in making sure these tools are not contaminating your submitted work, please contact appropriate parties to help you navigate this (SJSU IT, AEC) or the instructor themselves.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's catalog, <https://catalog.sjsu.edu/>, policy section. The new Add/Late Drop Policy, S22-6, will be implementing a new combined Add/Drop deadline of September 15 this fall. Find additional information here; Undergraduate Late Drop and Semester Withdrawal.

Information about the latest changes and new is available at the Advising Hub at <https://www.sjsu.edu/advising>

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)

CLO1 - Understand the scientific method and how it is applied specifically to test hypothesis and answer questions in psychology

CLO2 - Understand how to do a literature search in order to provide the background for a research project

CLO 3 - Comprehend research articles in psychological research and critically evaluate them

CLO 4 - Be able to design a study in psychology in order to test a specific hypothesis

CLO 5 - Understand the ethical ramifications of research in psychology and when/where they apply

CLO 6 - Use statistics in order to analyze a dataset, specific to the a priori hypotheses set up by the investigator

CLO 7 - Understand how information is disseminated in psychological research, through presentations and research papers, and be able to write your own APA-style paper

Course Materials

Methods in Behavioral Research

Author: Cozby PC, Bates S

Publisher: McGraw-Hill

Edition: 15th

ISBN: ISBN10: 1264558341 / ISBN13: 9781264558346

Course Requirements and Assignments

Lecture Exams

There will be four exams evenly spaced throughout the summer session based on the lecture material. Each exam will be a series of short-answer questions that need to be answered based on the lecture material. All exams will be open note and open book, but MUST be completed during the week in which they are assigned. Each exam will be opened at the beginning of the class week and close at the end and MUST be taken during that assigned week. There will be no final exam for the course. Each exam is worth 40 points (4x40 = 160 points total)

This assignment is related to : CLO1, CLO5, CLO7

Lab Assignments

Over the course of five weeks students will additionally complete an assignment that must be turned in during the week it is assigned (note : please see lab section of the course for more detail on these assignments and modules). This will be posted and submitted on the Canvas for the lab. Each Lab Assignment is worth 4 points a piece, and 5 need to be completed for full credit (4x5=20 points)

This assignment is related to : CLO2, CLO3, CLO4, CLO6

Specific Aims

Early in the semester, as you are putting together their lab project, you will be required to submit an idea for your research project, taking the form of a "Specific Aims" page that you would normally find on a grant. This spec aims page is worth 20 points (1x20=20 points)

This assignment is related to : CLO4

Final Research Project and Presentation

In the last week of classes, you will present (at a designated time) the results of the research project that you have completed. This talk will be in the form of a Powerpoint/Google Slide presentation and will be structured very similar to a scientific paper. You will need to schedule a time with the instructor during that final week to present this. This talk will be worth 80 points (1x80=80 points)

This assignment is related to : CLO6, CLO7

Grading Information

Your total grade will be an aggregate of your lecture and lab grades for a total of 280 points.

Four lecture exams (160 points)

Lab Assignments (20 points)

Specific Aims (20 points)

Final Research Project/Talk (80 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

| When | Content | Topics |
|---|--|--|
| WEEK ONE (June 1 - June 7) <i>Exam 1 Due : 6/7 11:59pm</i> <i>Lab 1 Due : 6/7 11:59pm</i> | Chapter 1 Chapter 2 Chapter 3 Chapter 4 | Using Science to Study Human Behavior Getting Started / Literature Search Ethics in Behavioral Research Fundamental Research Issues |
| WEEK TWO (June 8 - June 14) <i>Exam 2 Due : 6/14 11:59pm</i> <i>Lab 2 Due : 6/14 11:59pm</i> <i>Specific Aims Due : 6/14 11:59pm</i> | Chapter 5 Chapter 6 Chapter 7 | Measurement Concepts Observational Design Survey Research |

| | | |
|---|---|---|
| <p>WEEK THREE (June 15 - June 21) <i>Exam 3 Due : 6/21 11:59pm</i> <i>Lab 3 Due : 6/21 11:59pm</i></p> | <p>Chapter 12 Chapter 8 Chapter 9</p> | <p>Relational Design Experimental Design Conducting Experiments</p> |
| <p>WEEK FOUR (June 22 - June 28) <i>Exam 4 Due : 6/28 11:59pm</i> <i>Lab 4 Due : 6/28 11:59pm</i></p> | <p>Chapter 10 Chapter 11 Chapter 13 Chapter 14</p> | <p>Complex Experimental Design Other Experimental Designs Inferential Statistics Generalization</p> |
| <p>WEEK FIVE (June 29 - July 2) <i>Lab 5 Due : 7/2 11:59pm</i></p> | <p>n/a <i>Project Week, No Exam</i></p> | |
| | | |