San José State University Department of Psychology

Psychology 18, Introduction to Research Methods, Section 80, Spring 2023

Course and Contact Information

Instructor:	Dr. Christina Tzeng
Office Location:	Virtual for Spring 2023
Telephone:	N/A for Spring 2023
Email:	christina.tzeng@sjsu.edu
Office Hours:	Via Zoom on Fridays 1:00 PM – 3:00 PM PST, or by appointment
Class Days/Time:	Synchronous sessions via Zoom on Thursdays from 3:00PM – 4:15PM PST. Students will engage with asynchronous materials and assignments prior to each Thursday class session. See Course Format section below for further details.
Classroom:	See course Canvas page for Zoom link
Prerequisites:	PSYC 001 (General Psychology), STAT 95 (Elementary Statistics)

Course Description

Research is a lens through which we can make sense of the world. We are bombarded with information about research findings every day. How do we know what to believe? In this course, you will learn to evaluate information from the perspective of a social science researcher. You will learn the rationale, strengths, and limitations of using the scientific method for making discoveries about human behavior. Armed with the tools of a **discerning consumer of science**, you will be prepared to design and execute your own research.

<u>From SJSU Course Catalog:</u> Psychological research methods and design (experimental, quasi-experimental, correlational, and descriptive investigations) covering observation, instrumentation, and the collection, analysis, interpretation, and reporting of research data as illustrated through a review of original research in a variety of the subdisciplines of psychology.

Course Format

This is an **online-hybrid** course with both synchronous and asynchronous components. Each week on **Thursdays from 3:00PM – 4:15PM PST**, we will be using Zoom for our synchronous class sessions. During these sessions, we will engage in content-related discussions and activities. Office hours will also be held virtually via Zoom (see Course Policies section below). Asynchronous activities will include viewing pre-recorded lectures, reading assigned textbook pages, and completing homework assignments, exams, and a final project.

Canvas

All course content, such as the syllabus, lectures, assignments, grades, etc. will be on the Canvas Learning Management System <u>course website</u> at http://sjsu.instructure.com. You are responsible for regularly checking Canvas for course announcements and updates.

Program Learning Outcomes (PLO) & Course Learning Outcomes (CLO):

Upon successful completion of this course, students will achieve the following PLOs and CLOs (in bullet points):

PLO1. *Knowledge Base of Psychology*: Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

• **CLO1.** Demonstrate knowledge of the basic principles of the scientific method

PLO2. *Research Methods in Psychology*: Students will understand basic methodological approaches used in psychology, including research design, analysis, and interpretation.

- **CLO2.** Describe and distinguish between methodologies used in psychology research
- **CLO3.** Infer appropriate conclusions from psychology research

PLO3. *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.

- **CLO4**. Synthesize and evaluate claims made in social science research
- **CL05.** Critique the motivation, validity, generalizability, and adherence to ethical standards of psychology research

PLO4. *Application of Psychology*: Students will understand and be able to apply psychological principles to individual, interpersonal, group, and societal issues.

• **CLO6.** Articulate how knowledge of the scientific process can inform decisions in everyday life

PLO5. *Values in Psychology*: Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

- **CL07.** Respect the relative nature of empirical evidence
- **CLO8.** Recognize the value of intellectual curiosity and skepticism

Required Textbook

Bordens, K & Abbott, B. (2022). *Research Design and Methods: A Process Approach, 11th Edition.* McGraw Hill. ISBN-10: 1260837017

*An electronic version of this textbook can be rented or purchased for the semester online. Please be sure to purchase the **11**th **edition** of the book, as page numbers and content differ across editions.

Course Requirements and Assignments

Synchronous Components

As mentioned above, we will be holding synchronous sessions via Zoom on **Thursdays only from 3:00PM – 4:15PM PST**. Prior to each synchronous session, you will have completed a corresponding chapter reading and homework assignment. During synchronous sessions, we will be engaging as a class with the course material and assignments that you completed earlier in the week.

Synchronous class meetings will entail engaging in small-group discussions about the methodology used in a research report, the appropriateness of conclusions that can be drawn from research results, and the evaluation of research findings highlighted in popular media.

Attending Synchronous Sessions

- Synchronous sessions will be recorded and posted each week on Canvas. However, a large
 portion of synchronous sessions will be devoted to small group discussions and activities in
 breakout rooms, which are **not** recorded. Viewing the posted recordings of the Thursday
 synchronous sessions are **not** meant to be a substitute for attending class.
- Attending the weekly synchronous session is strongly encouraged. If you are unable to attend a synchronous session, please email me beforehand to let me know.
- Much research suggests that class attendance is a better predictor of college grades than any other known predictor of academic performance, including high school GPA and standardized test scores (Credé, Roch & Kieszczynska, 2010). Data gathered from SJSU students suggests that attending synchronous sessions:
 - (1) helps students feel more accountable for their studies
 - (2) helps them stay on track with course material
 - (3) makes students feel more engaged with course content, their peers, and the instructor
 - (4) allows them the opportunity to ask questions and receive an immediate response

All of these are factors that led to a more positive overall class experience.

Asynchronous Components

Readings & Pre-recorded Lectures

Students are responsible for thoroughly reading all assigned chapter pages and for viewing all pre-recorded lectures. Students must complete assigned readings and lecture viewings **before** the start of each synchronous class session. Lectures will not cover everything in the readings, but exams and homework assignments will include both lecture and reading materials.

Homework

Students will complete 10 homework assignments (one each week). Research suggests that frequent opportunities for students to think critically about course content enhances both the quality of their learning and their ability to self-regulate their study habits (e.g., Kitsantas & Zimmerman, 2009).

Homework assignments will assess your understanding of the material covered in the prerecorded lectures and assigned readings. The purpose of these homework assignments is to (1) encourage you to complete readings and lecture viewings in a timely manner, and (2) ensure that you are prepared to participate meaningfully each week during our Thursday synchronous sessions.

Participation

In-class participation during synchronous sessions is integral to success in this course. During synchronous class sessions, students will engage in various activities that will facilitate the application of course concepts to everyday phenomena.

Exams

Students will complete three exams, all **non-cumulative** and **open-book**. Open book exams have been found to encourage meaningful engagement with the material but induce lower levels of student anxiety than with closed-book exams (e.g., Gharib, Phillips, & Mathew, 2012).

Please note that exams will be **time-limited** such that you will need to study. Students are responsible for all material covered in lecture and assigned readings. Exams will include multiple-choice questions and short essay questions and will be conducted online on Canvas.

Each exam will be made available for a 24-hour window to allow for flexibility. Students will have **one attempt** for each exam and once begun, must complete the exam within a 1.5-hour window. The purpose of these exams is to assess your ability to not only understand course concepts, but also to think critically about them in the context of existing research, and to apply knowledge of the concepts to real-life events.

Final Project

Students will be asked to create a video presentation that evaluates the strengths and weaknesses of an existing empirical finding in the field of psychology. The purposes of this assignment are to have you apply your understanding of the scientific method to evaluating scientific reports and to practice making appropriate inferences from psychology research.

Additional University-Wide Information on Course Requirements

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Please review the following sources and policies, as well:

- <u>University Syllabus Policy S16-9</u> at http://www.sjsu.edu/senate/docs/S16-9.pdf.
- Office of Undergraduate Education's <u>Syllabus Information web page</u> at http://www.sjsu.edu/gup/syllabusinfo/

Grading Information

Weighting of Grades

Assignment	CLO Assessed	Percent of Final Grade
Homework	1, 2, 3, 4, 8	10%
Participation	1, 2, 4, 6, 7	15%
Final Project	1, 2, 5, 8, 9, 10	25%
Exams	1, 2, 6, 7, 8, 9, 10	50%

Final Letter Grade Scale

A plus: 97.00 to 100.00%	A: 93.00 to 96.99%	A minus: 90.00 to 92.99%
B plus: 87.00 to 89.99%	B: 83.00 to 86.99%	B minus: 80.00 to 82.99%
C plus: 77.00 to 79.99%	C: 73.00 to 76.99%	C minus: 70.00 to 72.99%
D plus: 67.00 to 69.99%	D: 63.00 to 66.99%	D minus: 60.00 to 62.99%
F : ≤ 59%		

Course Policies

- 1. I will not change grades unless there is a clerical error in the calculation of your grade.
- 2. **Requesting extensions:** There is built-in flexibility to account for difficulties you might encounter over the course of the semester (i.e., you can choose when within a 24-hour window to complete your open-book exams). You are encouraged to use this flexibility when you can anticipate setbacks to completing your coursework.

If you encounter an **unexpected** emergency outside of your control (e.g., COVID infection, eviction from your home, daycare closure, etc.) and you would like to request extension on an assignment, please email me with as much notice as possible in **advance** of the assignment deadline. **No late assignments will be accepted unless a request for extension has been approved.** Although contacting me does not guarantee that your request will be approved, know that I take all requests seriously and will work with you to find appropriate resources and a path forward for completing your coursework. Exams, homework assignments, activities, and projects that are not submitted within the agreed-upon time frame will result in a 0% for that exam, homework assignment, activity, or project.

Please note that my flexibility with respect to deadlines relates to emergencies **beyond your control**, and that this flexibility does not apply to vacation travel, conflicts with your work schedule, or other foreseeable circumstances that are within your control. I expect you to act ethically and honorably.

3. **Late assignments and exam make-ups:** Homework assignments and your final project must be submitted by the indicated due date and time unless I have approved an extension (see above). For each 24-hour period that your homework or final project is late, your score will drop 10% (100% will become 90%). For example, if you submit a homework assignment two hours late, your grade will drop by 10%, and if you submit it 25 hours late, your grade will drop by 20%, and so on. Inclass activities must be completed and submitted during the class session that it is assigned. No makeup exams will be given unless an extension has been approved **prior to the exam date**.

- 4. **Office hours:** Office hours will take place virtually via Zoom for Spring 2023. Please take advantage of office hours to speak with me about anything related to this course, your research or career interests, or anything else that I may be able to help with. The more I know about how my students are doing and what they are thinking, the better I can ensure that the course will be an engaging and interesting experience. Please <u>book an appointment online</u> at https://christinatzeng.youcanbook.me if you want to meet with me. If you cannot make my weekly office hours, please email me to schedule an appointment.
- 5. **Academic integrity:** Cheating, plagiarism, or other forms of academic dishonesty will not be tolerated. You are expected to work independently and on all homework assignments, exams, and projects. You are expected to complete all coursework on your own and use only the course materials provided to you (textbook, pre-recorded lectures, synchronous session materials), not any outside sources. All student-submitted work will be checked using plagiarism and A.I.-generated content detectors.

Any course material that is posted on Canvas (pre-recorded lectures, recordings of synchronous sessions, exams, homework assignments, project assignments) are for your own private, educational purposes and **cannot be shared at any point in time**, even after the semester ends.

If I find evidence of academic misconduct (e.g., working with another student on assignments or exams, posting any course material online, plagiarizing, using A.I.-generated content), you will receive a 0% on the assignment(s) in question, and I will file a report with the Office of Student Conduct and Ethical Development. Please visit the office's website for more information at https://www.sjsu.edu/studentconduct/policies/.

Virtual Classroom Protocol

Please see Module 0 on our course Canvas site for detailed information about the following:

- technology requirements (e.g., hardware, software, etc.)
- technology resources (e.g., tutorials on how to use Zoom and Canvas)
- guidelines for synchronous sessions (e.g., expectations for cameras and microphones)
- guidelines for online submission of assignments and exams
- guidelines for communication with the instructor
- student resources for academic, financial, and health support

Statement of Inclusion and Diversity

We all have diverse personal experiences, identities, and values that affect how we view the world. I hope that we can embrace this diversity and work together to ensure each student feels like a valued member of the learning community. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, immigration status, ethnicity, race, and culture. It is also my intent that students from all backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as an asset.

Accommodations

If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with AEC at https://www.sjsu.edu/aec/ to establish a record of their disability. Academic Senate Policy F06-2 at https://www.sjsu.edu/aec/docs/F06-2.pdf

University Policies

Per <u>University Policy S16-9</u> (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 <u>Syllabus Information web page</u> (http://www.sjsu.edu/gup/syllabusinfo), which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources.

References

Credé, M., Roch, S. G., & Kieszczynska, U. M. (2010). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research*, 80, 272-295.

Gharib, A., Phillips, W., & Mathew, N. (2012). Cheat sheet or open-book? A comparison of the effects of exam types on performance, retention, and anxiety. *Psychology Research*, *2*, 469-478.

Kitsantas, A., & Zimmerman, B. J. (2009). College students' homework and academic achievement: The mediating role of self-regulatory beliefs. *Metacognition and Learning*, *4*, 97-110.

PSYC 18-80 / Introduction to Research Methods, Spring 2023 **Course Schedule**

Note: The schedule is subject to modification (with fair warning) as the instructor deems necessary.

Module	Date (synchronous sessions)	Topics	Assignments Due* [Textbook Chapter (CH), Lecture (LEC), Homework (HW)]
0	Th 1/26	Welcome/Orientation	
1	Th 2/2	Why Research Matters	• Complete Orientation Assignments (HW0; due on 2/1)
	Th 2/9	Science as a Way of Thinking	Read assigned textbook pagesView LEC1Complete HW1 (due on 2/8)
	Th 2/16	The Scientific Method	Read assigned textbook pagesView LEC2Complete HW2 (due on 2/15)
	Th 2/23	Ethics in Behavioral Research	 Read assigned textbook pages View LEC3 Complete HW3 (due on 2/22)
	Th 3/2	Exam 1	
	Th 3/9	Validity and Reliability	Read assigned textbook pagesView LEC4Complete HW4 (due on 3/8)
	Th 3/16	Correlation and Causation	 Read assigned textbook pages View LEC5 Complete HW5 (due on 3/15)
2	Th 3/23	Observational Methods	 Read assigned textbook pages View LEC6 Complete HW6 (due on 3/22)
	Th 3/30	No Class (Spring Break)	demprete iiwo (uue en e/22)
	Th 4/6	No Class (Final Project Meetings)	
	Th 4/13	Survey Methods	 Read assigned textbook pages View LEC7 Complete HW7 (due on 4/12)
	Th 4/20	Exam 2	
3	Th 4/27	Experimental Methods	 Read assigned textbook pages View LEC8 Complete HW8 (due on 4/26)
	Th 5/4	Quasi-Experimental Methods	Read assigned textbook pagesView LEC9Complete HW9 (due on 5/3)
	Th 5/11	Using Research to Improve Lives	• Final Project due on W 5/10
	F 5/19	Exam 3 (Non-cumulative Final)	

^{*}Homework assignments are due on Canvas at **11:59 pm PST on Wednesdays**, the day before our Thursday synchronous sessions. Reading assignments are also meant to be completed prior to the accompanying synchronous session. Please see Canvas for specific textbook pages assigned.