

College of Social Sciences · Psychology

# Seminar in Experimental Psychology Section 01

**PSYC 220** 

Spring 2024 3 Unit(s) 01/24/2024 to 05/13/2024 Modified 02/01/2024

### Course Information

Specific Course Description: This course is intended to provide students with knowledge and skills necessary to conduct psychological research. Students will understand the essential concepts of research methodology and be able to critically assess various research techniques. Practical experience in designing and communicating research will also be gained.

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on <u>Canvas Leaning Management System course login website</u> at http://sjsu.instructure.com. You are responsible for regularly checking Canvas to learn any updates.

### Course Description and Requisites

Applications of experimental method to current problems in psychology. Individual design and experimental work required.

Prerequisite: PSYC 120A.

Letter Graded

# \* Classroom Protocols

You are expected to <u>arrive on time</u> for all class meetings and be responsible for all class content regardless of whether you are present. In the event you cannot attend the full class, please make a conscious effort to enter/exit the room with minimal disruption. <u>Important note</u>: On the days when an assignment is due or exam is given, you may not be allowed to complete the activity if you are late.

The use of electronic devices (e.g., laptop, tablet, cell phone) is restricted to note-taking or other instructional activities explicitly permitted by the instructor. Unauthorized uses of electronic devices are disruptive to the class, and you may lose the privilege to use them in the future or be asked to leave the class. Please mute all electronic devices before the beginning of class.

Student participation is an essential part of this course, and to facilitate open discussion you are asked to be respectful of others' views.

#### Recording of Classes

According to <u>University Policy S12-7</u>, which can be found at <a href="http://www.sjsu.edu/senate/docs/S12-7.pdf">http://www.sjsu.edu/senate/docs/S12-7.pdf</a>, "Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval." I ask that you do not publicly share or upload any materials for this course such as recorded lectures, test questions, lecture notes, homework questions, or any other class activities. The S12-7 policy is in place to protect the intellectual property and privacy of the instructors and students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or post these materials will be referred to the Student Conduct and Ethical Development office. Unauthorized recording may violate university and state law.

If there is evidence of you submitting the materials (user IDs are unique), you will be disciplined Office of Student Conduct and Ethical Development.

### ■ Program Information

**Program learning outcomes (PLOs)** are skills and knowledge that students will have achieved upon completion of the MA in Research and Experimental Psychology degree. Each course in our curriculum contributes to one or more of these PLOs. The PLOs for the degree are:

- 1. Advanced Knowledge Base in Research and Experimental Psychology. Students completing the Research and Experimental Psychology MA program will be able to demonstrate advanced knowledge of the major theoretical perspectives and research methods across areas of experimental psychology (e.g., Developmental, Social, Cognitive, and Physiological).
- 2. Research Skills and Scholarship. Graduates of our program will possess an advanced level of competence in research methods, statistical techniques, and technical writing skills. Students completing the Research and Experimental Psychology MA program are required to complete a thesis. The thesis will demonstrate:
  - 2.1 creative problem-solving in the design and implementation of empirical research.
  - 2.2 project management skills in the implementation of empirical research.
  - 2.3 advanced competency in the statistical analysis and interpretation of empirical

research findings.

- 2.4 communication (oral and written) of research findings at a professional level.
- 3. Career Enhancement. Students completing the Research and Experimental Psychology MA program will achieve career enhancement through placement in a doctoral program or acceptance of a position requiring a master's in psychology in the public or private sector.

# Course Learning Outcomes (CLOs)

Upon successful completion of this course, students will be able to:

- CLO1 Understand the concepts, vocabulary, and designs in psychology research.
- CLO2 Understand validity and reliability issues in research designs.
- CLO3 Develop methodological procedures to address potential problems in research.
- CLO4 Discuss ethical issues involved in research.
- CLO5 Critically evaluate published research studies.
- CLO6 Design a reliable and valid empirical research study.
- CLO7 Discuss research concisely in written and oral communication.

### 🖪 Course Materials

- Textbook: Creswell, J. W., & Creswell, J. D. (2018). Research design: *Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage. ISBN: 978-1506386706
- Additional readings may be available on Canvas, and you will also be required to make use of readings you locate in the library or through its website.
- Reliable portable computer and internet access, equipped with software for documents, spreadsheets, and presentations.
  - SJSU's license for Microsoft Office allows you a free subscription to Office 365. Visit the eligibility web site at <a href="http://www.office.com/getoffice365">http://www.office.com/getoffice365</a>
  - There are a few equipment loaning resources available on campus. Visit SJSU's Learn Anywhere website, at <a href="https://www.sjsu.edu/learnanywhere/equipment/index.php">https://www.sjsu.edu/learnanywhere/equipment/index.php</a>
- Supplemental materials, including videos, quizzes, and sample research proposals and tools, are available at the <u>publisher's web site</u>, at <a href="https://edge.sagepub.com/creswellrd5e">https://edge.sagepub.com/creswellrd5e</a>.

### Course Requirements and Assignments

#### (1) Midterm Exam (20%)

The midterm exam will assess your understanding of, and critical thinking about, the course materials. The exam will include short-answer and essay questions, and we will complete it during class time. The exam is open notes/book. (*Aligned with CLO 1~4.*)

#### (2) Research Proposal (50%)

The research proposal is your opportunity to demonstrate a mastery of methods and design principles and to apply them to original empirical research. You will design and propose an original research study in your area of interest (or **substantially** modify a proposal you have already completed). Specifically, you will decide on a topic of investigation, conduct a reasonable literature review of the topic, design your study, determine appropriate statistical analyses, give an oral presentation of the proposed study, and write a thesis-quality proposal. Your proposal should be 10-12 pages in length, excluding the title page, the abstract page, and the references. Proposals should cite at least 10 relevant journal articles as sources and must conform to the current APA style.

In addition to writing about research, the ability to present your research concisely to a general audience is highly valued. Planning for the presentation and getting feedback from others can also serve to help you improve your research. It is a win-win situation! To this end, you will submit a presentation recording of your proposed study (slides with voice-over, in MP4 format). Each presentation should be between 5 and 6 minutes. Your ability to adhere to the time limit will be part of the evaluation criteria. This strict time limit simulates professional conference presentations, thesis defenses, and job interviews.

Finally, part of being a researcher is to help advance the field by giving feedback to others' work. You will complete peer reviews to give feedback on your fellows' writing and presentation recordings. (*Aligned with CLO 1~7.*)

#### (3) Homework Assignments (20%)

Homework assignments are designed to help you build towards your research proposal; they are also a great way to review course concepts as you will provide peer feedback to one another. Full credit will only be given for fully completed assignments that reflect graduate-level conceptual and written work. This requires, at minimum, that APA style is used consistently, that the writing is intelligible, and that the work is largely free of errors in spelling, punctuation, and grammar. All homework assignments must be submitted through Canvas. (*Aligned with CLO 1~7*, but specific CLOs vary between assignments.)

#### (4) Class participation = 10%

Class discussion is an important part of the course, and everyone is expected to attend all classes, read all assigned materials <u>before class</u>, contribute to the discussion, and complete all in-class activities during the allotted time. (*Aligned with CLO 1~5, & 7.*)

\*\*\*If you miss the activity, you will not earn the points and cannot make up the lost points later. For this reason, your lowest three participation scores will be dropped.

### ✓ Grading Information

Assignments will be graded in terms of analysis and delivery: namely, your insight and expression. Make sure that you present a thoughtful analysis of the topic (through, for example, comparison, contrast, critique). Your writing and speech should be explicit, organized, and free of editorial errors.

A late submission will receive a 10% deduction if submitted past the deadline but before the end of day. Thereafter, a 10% <u>daily deduction</u> applies.

#### Make-Up Policy

A make-up or extension on a course requirement will be given under *extraordinary and well-documented* circumstances. Where such circumstances exist, it is your responsibility to notify me by email as soon as possible and *no later* than two (2) days after the scheduled Test/Due date; include your full name and telephone number (with area code) in your email. Appropriate written documentation (e.g., a physician's note) is required for a make-up to receive the full make-up credit. If you are not able to obtain such documentation and you have a serious and extenuating circumstance that has prevented you from fulfilling a requirement as scheduled, notify me as soon as possible. Depending on the circumstances, you may be allowed a make-up. However, a make-up without appropriate written documentation will result in partial credit (i.e., points will be deducted). If you have questions about this policy, please see me.

Important Note. In-class assignments must be completed in person during class and cannot be submitted later or made up. For example, if you miss a class or arrive too late, you will lose the participation points.

#### Determining Your Course Grade

In calculating your course grade, you will need to take into account the scores you have earned on each course requirement <u>in terms of its percentage weight</u> of the course grade (see *Summary of Course Requirements* below). Then, use the *Grade Scale* that follows to convert your weighted score into a letter grade.

Grade Scale

A+ = 98.00% or higher	A = 97.99-93.00%	A- = 92.99- 90.00%
B+ = 89.99-87.00%	B = 86.99-83.00%	B- = 82.99- 80.00%
C+ = 79.99-77.00%	C = 76.99-73.00%	C- = 72.99- 70.00%
D+ = 69.99-67.00%	D = 66.99-63.00%	D- = 62.99- 60.00%
F = below 60.00% Unsatisfactory		

# **university Policies**

Per <u>University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf)</u>, 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 <u>Syllabus Information</u> (<a href="https://www.sjsu.edu/curriculum/courses/syllabus-info.php">https://www.sjsu.edu/curriculum/courses/syllabus-info.php</a>) web page. Make sure to visit this page to review and be aware of these university policies and resources.

### **dia** Course Schedule

The schedule is subject to change with fair notice; changes will be announced in lecture and via electronic communication. It is your responsibility to stay informed of the course schedule and announcements.

Assignments are due at the beginning of the class on Tuesdays, unless otherwise noted.

# Course Schedule

Date	Topics	Read before Tuesday class	Assignments due before Tuesday class
1/30	Course introduction		
2/6	Topic generation, research approaches	Ch. 1	
2/13	Literature review	Ch. 2	HW1: Topic & approaches
2/20	Variables and theory	Ch. 3	
2/27	Writing strategies	Ch. 4 up to page 88	HW2: Literature map & model development
3/5	Introductions and purpose	Ch. 5 Ch. 6	
3/12	Ethics	Ch. 4 pages 88+	HW3: CITI course for Social & Behavioral Research (SBR)
3/19	Research questions and hypotheses	Ch. 7	HW4: Purpose and hypotheses
3/26	Midterm		
No Class	Recess 4/1 ~ 4/5		

Date	Topics	Read before Tuesday class	Assignments due before Tuesday class
4/9	Reliability and validity	Ch. 8	HW5: Introduction
4/16	Reliability and validity		
4/23	Research Design		HW6: Measures and analysis
4/30	Proposal workshop		HW7: Proposal draft
5/7	Proposal feedback		Final proposal
12:15-2:30pm, FRIDAY May 17, 2024	By 12:15pm: Submit your presentation recording  By 11:59pm: complete two peer reviews as assigned		