San José State University Social Sciences/Psychology PSYC 118, Advanced Research Methods Lecture & Lab,

Section 50/51/52, Fall, 2022

Course and Contact Information

Instructor(s): Sandra Trafalis Office Location: DMH 232 Telephone: (408) 924-5614

Email: Sandra.trafalis@sjsu.edu

Office Hours: Friday 5:30-7:30 or by appointment

Class Days/Time: T/TH 3:00-3:50 (section 50) / T/TH 4:15 -6:15 (Section 51/52)

Classroom: Online

Prerequisites: Psyc 1, Psyc 18, Stat 95

Course Description

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.

Course Format

This course adopts an online delivery format. Students will need internet connectivity, access to SPSS, library databases and CANVAS.

Program Learning Outcomes

Upon successful completion of the requirements for a major in psychology, students will be able to:

- PLO1 Knowledge Base of Psychology identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology
- PLO2 Research Methods in Psychology design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations
- PLO3 Critical Thinking Skills in Psychology use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes
- PLO4 Application of Psychology apply psychological principles to individual, interpersonal, group, and societal issues
- PLO5 Values in Psychology value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society

Course Learning Outcomes (CLO)

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

- 1. CLO 1 Understand the differences and limitations of experimental and correlational research designs.
- 2. CLO 2 Evaluate psychological research as to its reliability, validity, utility, and adherence to ethical guidelines.
- 3. CLO 3 Identify threats to validity in research, including confounds and threats to generalizability.
- 4. CLO 4: Execute a research project utilizing experimental design and interpret the results.
- 5. CLO 5: Perform statistical analyses on data including descriptive statistics and inferential statistics...

Required Texts/Readings (Required - Delete the word "Required" in final draft)

Textbook

Trochim, W., Donnelly, J., & Arora, K. (2016). Research Methods The Essential Knowledge Base, 2nd Edition. Cengage. ISBN:9780357692684

American Psychological Association. (2019). Publication manual of the American Psychological Association (7th ed.). Washington, DC: Author.

Other technology requirements / equipment / material

Current Version of SPSS which can be downloaded from SJSU Website (information available on course CANVAS on downloading.

Library Liaison

Christa Bailey

Email: christa.bailey@sjsu.edu

Course Requirements and Assignments

Assessments for this class will consist of weekly quizzes completed through CANVAS, online class activities which could include discussion posts, video responses, and group project activities. There are 4 project deliverables that include (1) Research Proposal, (2) Online Data Collection Tool (3) Data Analysis (4) Interpretation of Results. Students will also complete a final research project. Due dates for each of the assignments is found in CANVAS.

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

Final Examination or Evaluation

The final research project will be the culminating activity for this course. The due date for the assignment is posted in CANVAS and will be due on the day of the final exam.

"Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment."

Grading Information

Grading Policy

Grade	Points	Percentage
A	930 to 1000	93 to 95%
A minus	900 to 929	90 to 92%
B plus	860 to 899	86 to 89 %
В	830 to 859	83 to 85%
B minus	800 to 829	80 to 82%
C plus	760 to 799	76 to 79%
C	730 to 759	73 to 75%
C minus	700 to 729	70 to 72%
D plus	660 to 699	66 to 69%
D	630 to 659	63 to 65%
D minus	600 to 629	60 to 62%

Late work will be reduced by 10%. The last day to submit work is the last day of instruction for the semester. There may be extra credit opportunities and they will not exceed 5% of the total point value of the class. This course must be passed with a C or better as an SJSU graduation requirement

University Policies

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

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Course Schedule

Module	Module Topic	Reading Assignment	Assignment
1	What is the Scientific Method?	Chapter 1	Weekly Assessments including Quizzes, Discussion Posts, and Project Related Activities Zoom Meeting see CANVAS for
			Link
2	Conducting Ethical Research	Chapter 2	Weekly Assessments including Quizzes, Discussion Posts, and Project Related Activities Zoom Meeting see CANVAS for
			Link
3	Sampling Techniques in Research & Design	Chapter 3	Weekly Assessments including Quizzes, Discussion Posts, and Project Related Activities
			Zoom Meeting see CANVAS for Link
4	Survey Methodologies	Chapter 5	Weekly Assessments including Quizzes, Discussion Posts, and Project Related Activities
			Zoom Meeting see CANVAS for Link
5	Scales of Measurement, Reliability, & Validity	Chapter 4	Weekly Assessments Project Activity #1 Research Question & Background Literature Overview & References DUE (9/19)
			Zoom Meeting see CANVAS for Link
6	Experimental Designs	Chapter 11 Plus assigned readings in CANVAS.	Weekly Assessments Project Activity #2: Proposing Ethical Research, Informed Consent and Survey Questions DUE (10/2)

7	Collecting Data for your Project	Handout Descriptive Methods	Weekly Assessments Project Activity #3: Survey and Measurement Activity with Live Survey Link DUE (10/24)
8	Analyzing your Data	Chapter 11 Plus assigned readings in CANVAS.	Weekly Assessments Students will complete each other's surveys. Surveys remain open for data collection.
9	Communicating your Results	Chapter 8 Plus assigned readings in CANVAS.	Weekly Assessments Final Office Hours meeting for the semester or by appointment.
Final Assessment	The final cumulative project will be the completed research project due on the day of the final exam (12/10)		

Any changes will be published in CANVAS with advanced notice. Changes would be made to improve the pass or flow of the class and/or based on student need. All changes will be announced and posted in CANVAS for students. Due dates are posted in CANVAS