



Course Outline

2026-2027 Catalog

PSY 7 - Introduction to Research Methods in Psychology

Catalog Description

Transfer Status: CSU/UC

Prerequisite: PSYC C1000, STAT C1000 or STAT C1000E

Unit(s): 3.00

Lecture: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

Total: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

Course Description: This course surveys various research methods with an emphasis on research design, experimental procedures, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology will be illustrated through a selected review of research in neurophysiology, sensation, perception, learning and/or memory. (C-ID PSY 200).

Objectives

Upon successful completion of this course, the student should be able to:

1. Explain the basic principles of the scientific method.
2. Critically evaluate research reports.
3. Synthesize a body of research findings.
4. Develop testable hypotheses.
5. Demonstrate knowledge of general research designs, experimental methods, and standard research practices.
6. Select appropriate research designs to test hypotheses.
7. Explain the ethical treatment of human and animal participants in research and the institutional requirements for conducting research.
8. Assess the generalizability of study results.
9. Demonstrate proficiency in APA style.

Course Content

Topic Titles / Suggested Time Topic	
<u>Lecture</u>	
<u>Topics</u>	<u>Lec Hrs</u>
Introduction:	9.00
a. Scientific and nonscientific approaches to knowledge	
b. Dependent and independent variables	
c. Validity and reliability	
d. Scientific method and its goals	
e. Causal and correlational relationships	
f. Samples and sampling methods	
g. Theoretical and operational definitions	
h. Selection of appropriate statistical tests (chi-square, correlation, t-tests, ANOVA)	
i. Evaluation peer-reviewed literature	
j. APA format	
Ethical issues in the conduct of psychological research:	7.00
a. APA ethical standards	
b. Risk/benefit ratio of research	
c. Use of deception in research	
d. Human and animal subject use	
Descriptive methods - observation and survey research:	7.00
a. Observational techniques and rationale	
b. Reactivity, demand characteristics, observer bias, expectancy effects, and other biases	
c. Theories, research questions, hypotheses	
d. Interpretation and limits of correlational data	
e. Levels of measurement	
Unobstrusive measures of behavior (physical trace methods, archival research methods, content analysis).	7.00
Experimental Methods:	7.00
a. Independent group designs	
b. Repeated measures designs	
c. Reasons to use and limitations of experimental methods	

<u>Topics</u>	<u>Lec Hrs</u>
d. Counterbalancing and practice effects	
e. Main effects and interaction effects using both table and graph methods	
Other research designs:	7.00
a. single-case research design	
b. quasi-experimental designs	
Program evaluation:	7.00
a. characteristics of true experiments and quasi-experiments	
Total Hours:	51.00

Methods of Instruction

- A. Class Activities
- B. Collaborative Group Work
- C. Group Discussions
- D. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- E. Lecture
- F. Problem-Solving Sessions
- G. Reading Assignments

Methods of Evaluation

- A. Exams/Tests
- B. Research Projects
- C. Oral Presentation
- D. Homework
- E. Class participation
- F. Essays and research papers
- G. Research driven student activities, written assignments in APA format (required)

Examples of Assignments

Reading Assignments

1. Read the article on how to design a research project and write 300 words on a research project of personal interest noting the proper sequence of design.
2. Read the Chapter 1 and write 300 words on the pros and cons of conducting two different types of research of your choosing.

Writing Assignments

1. Keep a weekly journal of observations in daily life such as topic ideas, interesting research facts from class, and examples of the different types of use of research in the media and write 100 words for each entry, weekly.
2. Watch "Environmental Hysteria". Write a 400 word response assessing the quality of evidence and research design of their experiment.

Out-of-Class Assignments

1. Write a 300 word response detailing the similarities and difference between reality TV shows and the results of the Robber's Cave research from Chapter 5 of your class textbook with a focus on ethical concerns.
2. Identify the experimental and control conditions and the dependent and independent variables in the handout provided in class and posted in Canvas entitled, "A Day of Research in a Laboratory Environment".

Recommended Materials of Instruction

Cozby, P. and Bates, S. (2023). *Methods in Behavioral Research*. McGraw-Hill, 15th. 9781260883053.

Cuttler, Jhangiani, and Leighton. (2019). *Research Methods in Psychology*. <https://open.umn.edu/opentextbooks/textbooks/75>, 4th. OER.

Minimum Qualifications

Sociology (Masters Required)

Psychology (Masters Required)

Created/Revised by: Valle, Heather

Date: 10/23/2023