

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

PSY 7 - Introduction to Research Methods in Psychology

3 Unit(s)

Prerequisite(s): PSY 1, MATH 18

Recommended Prep: SOC 2 and Reading Level IV; English Level IV; Math Level III

Transfer Status: CSU/UC

51 hours Lecture

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).

II. OBJECTIVES

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

- A. Explain the basic principles of the scientific method.
- B. Critically evaluate research reports.
- C. Synthesize a body of research findings.
- D. Develop testable hypotheses.
- E. Demonstrate knowledge of general research designs, experimental methods, and standard research practices.
- F. Select appropriate research designs to test hypotheses.
- G. Explain the ethical treatment of human and animal participants in research and the institutional requirements for conducting research.
- H. Assess the generalizability of study results.
- I. Demonstrate proficiency in APA style.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Introduction: scientific and nonscientific approaches to knowledge; dependent and independent variable; validity and reliability; scientific method and its goals; causal and correlational relationships; samples and sampling methods; theoretical and operational definitions; selection of appropriate statistical tests (chi-square, correlation, t-tests, ANOVA); evaluation peer-reviewed literature; APA format.	9.00
2. Ethical issues in the conduct of psychological research: APA ethical standards; risk/benefit ratio of research; use of deception in research; human and animal subject use.	7.00
3. Descriptive methods - observation and survey research: observational techniques and rationale; reactivity, demand characteristics, observer bias, expectancy effects, and other biases; theories, research questions, hypotheses; interpretation and limits of correlational data; levels of measurement.	7.00
4. Unobstrusive measures of behavior (physical trace methods, archival research methods, content analysis).	7.00

5. Experimental Methods: independent group designs; repeated measures designs; reasons to use and limitations of experimental methods; counterbalancing and practice effects; main effects and interaction effects using both table and graph methods.	7.00
6. Other research designs: single-case research design; quasi-experimental designs.	7.00
7. Program evaluation: characteristics of true experiments and quasi-experiments.	7.00
Total Hours	51.00

IV. **METHODS OF INSTRUCTION**

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

V. **METHODS OF EVALUATION**

- A. Exams/Tests
- B. Quizzes
- C. Research Projects
- D. Papers
- E. Oral Presentation
- F. Homework
- G. In-class activities
- H. Written Assignments in APA format (required)

VI. **EXAMPLES OF ASSIGNMENTS**

- A. Reading Assignments
 - 1. Read the chapter on basic research principles and be prepared to discuss in class.
 - 2. Read an article on how to design a research project and summarize.
- B. Writing Assignments
 - 1. Keep a journal of observations in daily life such as topic ideas, interesting facts from class, and examples of the use of research in the media.
 - 2. Watch “Environmental Hysteria.” Write a 400 word response assessing the quality of evidence and research design of their experiment.
- C. Out-of-Class Assignments
 - 1. Identify the experimental and control conditions and the dependent and independent variables in the handout provided.
 - 2. Write a 400 word response detailing the similarities and difference between reality TV shows and the results of the Robber’s Cave research from your textbook with a focus on ethical concerns.

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

- A. Cozby, P.. Methods in Behavioral Research. 10 Edition. McGraw-Hill, 2008.

Created/Revised by: Steve Hall
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