Lassen Community College Course Outline

PSY 5 Introduction to Research Methods

3.0 Units

I. Catalog Description

This course surveys various social/behavioral research methods with an emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology will be examined through a review of research in a variety of the subdisciplines of psychology. This course has been approved for online, hybrid and correspondence delivery.

Prerequisite(s): PSY 1 Introduction to Psychology or SOC 1 introduction to Sociology; Math 40 Statistics

Corequisite(s):

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Transfer to CSU/UC

General Education Area: B

CSU GE Area: D9 IGETC Area: 4I *C-ID PSY 200*

51 hours Lecture, 102 Expected Outside Class Hours, 153 Total Student Learning Hours

Scheduled: Spring

II. Coding Information

Repeatability: Not Repeatable

Grading Option: Graded or Pass no Pass Credit Type: Credit - Degree Applicable

TOP Code: 200100

III. Course Objectives

A. Course Student Learning Outcomes

Upon successful completion of this course, the student will:

- 1. Demonstrate knowledge of general research designs, experimental and non-experimental methods, and standard research practices.
- 2. Demonstrate an understanding of ways to critically evaluate published research.
- 3. Demonstrating competence in developing a research paper to include APA style writing.
- 4. Demonstrate an understanding of the ethical principles from psychological science.

B. Course Objectives

Upon successful completion of this course, the student will:

- 1. Explain the basic principles of the scientific method.
- 2. Explain how to Synthesize a body of research findings.
- 3. Discuss methods used to Develop and test hypotheses.
- 4. Select appropriate research designs to test hypotheses.

- 5. Explain the ethical treatment of human and animal participants in research and the institutional requirements for conducting research.
- 6. Assess the generalizability of study results.

IV. Course Content

- A. Introduction
 - 1. Scientific and nonscientific approaches to knowledge
 - 2. Dependent and independent variables
 - 3. Validity and reliability
 - 4. Scientific method and its goals
 - 5. Causal and correlational relationships
 - 6. Samples and sampling methods
 - 7. Theoretical and operational definitions
 - 8. Selection of appropriate statistical tests (chi-square, correlation, t-tests, ANOVA)
 - 9. Evaluating peer-reviewed literature
 - 10. APA format
- B. Ethical Issues in the Conduct of Social/Behavioral Research
 - 1. APA ethical standards
 - 2. Risk/benefit ratio of research
 - 3. Use of deception in research
 - 4. Human and animal subject use
- C. Descriptive Methods Observation and Survey Research
 - 1. Observational techniques and rationale
 - 2. Reactivity, demand characteristics, observer bias, expectancy effects, and other biases
 - 3. Theories, research questions, hypotheses
 - 4. Interpretation and limits of correlational data
 - 5. Levels of measurement
- D. Unobtrusive Measures of Behavior (physical trace methods, archival research methods, content analysis)
- E. Experimental Methods
 - 1. Independent Group Designs
 - 2. Repeated Measures Designs
 - 3. Reasons to use and limitations of experimental methods
 - 4. Counterbalancing and practice effects
 - 5. Main effects and interaction effects using both table and graph methods
- F. Other Research Designs
 - 1. Single-Case Research Design
 - 2. Quasi-Experimental Designs
- G. Program Evaluation
 - 1. Characteristics of true experiments and quasi-experiments

V. Assignments

A. Appropriate Reading

From text and Social/Behavioral Journals. Review of current research in the field

B. Writing Assignments

Write pilot study with standards for publication in a social/behavioral journal; evaluate current research in the field of psychology to determine if the study is well

written, well conducted and well documented and if results support the hypothesis (critical thinking)

C. Expected Outside Assignments

Design and conduct pilot study in area appropriate to social/behavioral research

D. Specific Assignments that Demonstrate Critical Thinking

Evaluate current research in the field to determine if it meets standard of practice. Design a pilot study that meets current standard of practice. Determine if reasons why the results would or would not support original hypothesis

VI. Methods of Evaluation

Traditional Classroom Evaluation

In-class quizzes using mixed format, objective multiple choice taken from the reading assignments, written assignments in APA format (required), and class participation/discussion of current research practices

Online Evaluation

A variety of methods will be used to include research papers, synchronous and asynchronous discussion, online quizzes developed from text and other reading assignments and written assignments in APA format (paper appropriate for publication).

Hybrid Evaluation

A combination of traditional classroom and online evaluations will be used to include traditional objective and essay exams taken from the text and other reading assignments, written assignments in APA format (paper appropriate for publication) and in class and online discussions.

Correspondence Evaluation

Same as face to face with the exception of the desired use of proctored exams and exclusion of participation in classroom activities. Students will be expected to complete assignments and activities equivalent to in-class assignments and activities. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

∑ Traditional Classroom Del	ivery ⊠ Correspondence Delivery
⊠ Hybrid Delivery	Online Delivery

Traditional Classroom Instruction:

Lecture, class discussion, selected multimedia presentations

Online Delivery:

Online written lectures, participation in forum based discussion, online exercises/assignments contained on website. Discussion papers, email communications, postings to forums, and web-links will comprise the method of instruction.

Hybrid Delivery:

A combination of traditional classroom and online instruction will be utilized. Each semester 34 lecture hrs will be taught face-to face by the instructor and 17 lecture hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of lectures, visual aids, and group presentations. Online delivery will consist of participation in forum-based discussions and posts, web links, email communications, lecture posts, and online lectures.

Correspondence Delivery:

Assigned readings, instructor-generated typed handouts, typed lecture materials, exercises and assignments equal to face to face instructional delivery. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

VIII. Representative Texts and Supplies

Cuttler, Carrie. *Research methods in psychology*, 4th ed. 2019, ISBN 13: 9781999198107

 $\underline{https://open.umn.edu/opentextbooks/textbooks/75}$

IX. Discipline/s Assignment

Psychology

X. Course Status

Current Status: Active

Original Approval Date: 02/19/2013 Board Approval Date: 03/12/2013 Chancellor's Approval Date: 04/11/2013

Revised By: Tom Kareck

Curriculum/Academic Standards Committee Revision Date: 10/18/2022