



PSYC 220 - Research Methods in Psychology Course Outline

Approval Date: 03/11/2021

Effective Date: 08/13/2021

SECTION A

Unique ID Number CCC000547030

Discipline(s) Psychology

Division Social Sciences

Subject Area Psychology

Subject Code PSYC

Course Number 220

Course Title Research Methods in Psychology

TOP Code/SAM Code 2003.00 - Psychology, Other / E - Non-Occupational

Rationale for adding this course to the curriculum Updating textbooks and revising examples in the "methods of evaluation" and "assignments" sections only

Units 3

Cross List N/A

Typical Course Weeks 18

Total Instructional Hours

Contact Hours

Lecture 54.00

Lab 0.00

Activity 0.00

Work Experience 0.00

Outside of Class Hours 108.00

Total Contact Hours 54

Total Student Hours 162

Open Entry/Open Exit No

Maximum Enrollment 30

Grading Option Letter Grade Only

Distance Education Mode of Instruction On-Campus

SECTION B

General Education Information:

SECTION C

Course Description

Repeatability May be repeated 0 times

Catalog Description This course surveys various psychological 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 disciplines and subdisciplines in psychology.

Schedule Description

SECTION D

Condition on Enrollment

1a. Prerequisite(s)

- MATH 232 with a minimum grade of C or better
- PSYC 120 with a minimum grade of C or better

1b. Corequisite(s): *None*

1c. Recommended

- ENGL 120 with a minimum grade of C or better

1d. Limitation on Enrollment: *None*

SECTION E

Course Outline Information

1. Student Learning Outcomes:

- Understand the scientific method as it is applied in the behavioral sciences.
- Analyze the appropriate research methodologies that would be used to test various hypotheses.
- Use APA style to write a research report.

2. Course Objectives: Upon completion of this course, the student will be able to:

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

3. Course Content

- Introduction
 - Scientific and nonscientific approaches to knowledge
 - 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. Evaluating peer-reviewed literature
- j. APA format
- B. Ethical Issues in the Conduct of Psychological Research
 - a. APA ethical standards
 - b. Risk/benefit ratio of research
 - c. Use of deception in research
 - d. Human and animal subject use
- C. Descriptive Methods — Observation and Survey Research
 - 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
- D. Unobtrusive Measures of Behavior (physical trace methods, archival research methods, content analysis)
- E. Experimental Methods —
 - a. Independent Group Designs
 - b. Repeated Measures Designs
 - c. Reasons to use and limitations of experimental methods
 - d. Counterbalancing and practice effects
 - e. Main effects and interaction effects using both table and graph methods
- F. Other Research Designs —
 - a. Single-Case Research Design
 - b. Quasi-Experimental Designs
- G. Program Evaluation
 - a. Characteristics of true experiments and quasi-experiments
 - b.

4. Methods of Instruction:

Discussion: discussion of the use of appropriate research techniques, ethics in behavioral science research, etc.

Experiments: in-class and/or out-of-class experiments

Lecture: lectures on topics related to research methods including examples of research findings and demonstrations of APA formatting

Projects: research paper written in APA format

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

Exams/Tests -- multiple-choice and essay

Quizzes -- multiple-choice

Research Projects -- research paper written in APA format

Final Exam -- multiple-choice and essay

Mid Term -- multiple-choice and essay

Additional assessment information:

1. Written assignments in APA format (6 to 12 pages in length) are required for this course.
2. Essay exam questions

For example:

- a) Define the terms "control group" and "experimental group." Create an example of an experiment that uses these two groups and describe what the experimenter would be doing differently with each of the groups.
- b) Distinguish between internal validity and external validity. Create an example of a research study that is high in internal validity, and explain the features of the study that make it internally valid. Create another example of a study that would be high in external validity, and explain the features of the study that make it externally valid.

Letter Grade Only

6. Assignments: State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

For example:

1. Read about research ethics in chapter 4 of the Morling textbook.
2. Read examples of contemporary journal articles in psychology.

For example:

- a) Articles from the Journal of Personality and Social Psychology
- b) Articles from the Journal of Experimental Psychology

B. Writing Assignments

For example:

1. Write a full research paper(6-12 pages in length) using APA style.
2. Write an analysis (1-3 pages in length) of the appropriateness of using various research methods to examine specific research questions in psychology.

For example:

- a) If a psychologist wants to examine the relationship between recreational drug use during adolescence and a diagnosis of depression during adulthood, which research method would be most appropriate to use to investigate this relationship and why?
- b) If a researcher wants to determine if the level of violence present in a video game affects a game player's likelihood of acting aggressively in other social contexts, how could this be examined? What research method(s) could be used here? How could the variables involved be operationally defined?

C. Other Assignments

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7. Required Materials

A. EXAMPLES of typical college-level textbooks (for degree-applicable courses) or other print materials.

Book #1:

Author: Morling, B
Title: Research Methods in Psychology
Publisher: Norton
Date of Publication: 2017
Edition: 3rd

Book #2:
Author: Lewandowski, G., Ciarocco, N., & Strohmetz, D
Title: Discovering the Scientist Within
Publisher: Macmillan
Date of Publication: 2019
Edition: 2nd

Manual #1:
Author: American Psychological Association
Title: The Publication Manual of the American Psychological Association,
7th edition
Publisher: American Psychological Association
Date of Publication: 01-01-2019

B. Other required materials/supplies.