PSYC-220: RESEARCH METHODS IN PSYCHOLOGY

Effective Term
Fall 2025

CC Approval
02/07/2025

AS Approval
02/13/2025

BOT Approval
02/20/2025

SECTION A - Course Data Elements

CB04 Credit Status
Credit - Degree Applicable

Discipline

Minimum Qualifications	And/Or
Psychology (Master's Degree)	

Subject Code
PSYC - Psychology
Course Number
220

Department
Psychology (PSYC)

Division
Social Sciences (SOCS)

Full Course Title
Research Methods in Psychology

Short Title
Research Methods in Psychology

CB03 TOP Code
2003.00 - Behavioral Science

CB08 Basic Skills Status
NBS - Not Basic Skills

CB09 SAM Code
E - Non-Occupational

Rationale
Updating common course numbering course change.

SECTION B - Course Description

Catalog Course 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.

SECTION C - Conditions on Enrollment

Open Entry/Open Exit
No

Repeatability
Not Repeatable

Grading Options
Letter Grade Only

Allow Audit
Yes

Requisites

Prerequisite(s)
Completion of PSYC-C1000 and STAT-C1000 with a minimum grade of C.

Advisory Prerequisite(s)
Completion of ENGL-C1000 or ENGL-120B with a minimum grade of C or appropriate placement.

Requisite Justification

Requisite Description
Course Not in a Sequence

Subject
PSYC
Course #
C1000

Level of Scrutiny
Content Review

Upon entering this course, students should be able to:
1. Demonstrate familiarity with the major concepts, theoretical perspectives, research methods, core empirical findings, and historic trends in psychology.
2. Explain (including advantages and disadvantages) and compare major theoretical perspectives of psychology (e.g., behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic and socio-cultural).
3. Demonstrate knowledge and understanding of the following nine general domains: (1) biological bases of behavior and mental processes, (2) sensation and perception, (3) learning and memory (4) cognition, consciousness, (5) individual differences, psychometrics, personality, (6) social processes (including those related to socio-cultural and international dimensions), (7) developmental changes in behavior and mental processes that occur across the lifespan, (8) psychological disorders, and (9) emotion and motivation.
4. Describe and demonstrate an understanding of applied areas of psychology (e.g., clinical, counseling, forensic, community, organizational, school, health).
5. Draw the distinction between scientific and non-scientific methods of understanding and analysis.
6. Recognize and understand the impact of diversity on psychological research, theory and application, including (but not limited to): age, race, ethnicity, culture, gender, socio-economic status, disability, and sexual orientation.
7. Understand and apply psychological principles to personal experience and social and organizational settings.
8. Demonstrate critical thinking skills and information competence as applied to psychological topics

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Requisite Description
Course Not in a Sequence

Subject
STAT
Course #
C1000

Level of Scrutiny
Content Review

Upon entering this course, students should be able to:
1. Compute and compare descriptive statistics.
2. Construct and analyze statistical graphs using computer software.
3. Calculate probabilities using laws of probability and discrete and continuous probability distributions.
4. Estimate parameters with confidence intervals using one and two samples.
5. Perform hypothesis tests using one and two samples.
6. Create and apply regression models based on experimental data.
7. Evaluate published statistical results in the media.
8. Apply computer software to all the above.

SECTION D - Course Standards

Is this course variable unit?
No

Units
3.00

Lecture Hours
54.00

Outside of Class Hours
108

Total Contact Hours
54

Total Student Hours
162

Distance Education Approval

Is this course offered through Distance Education?
Yes

Online Delivery Methods

DE Modalities	Permanent or Emergency Only?
Entirely Online	Permanent
Hybrid	Permanent
Online with Proctored Exams	Permanent

SECTION E - Course Content

Student Learning Outcomes

	Upon satisfactory completion of the course, students will be able to:
1.	Understand the scientific method as it is applied in the behavioral sciences.
2.	Analyze the appropriate research methodologies that would be used to test various hypotheses.
3.	Use APA style to write a research report.

Course Objectives

	Upon satisfactory completion of the course, students will 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 and test hypotheses.
5.	Demonstrate knowledge of general research designs, experimental and non-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

1. Introduction
   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. Evaluating peer-reviewed literature
   j. APA format
2. 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
3. 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
4. Unobtrusive Measures of Behavior (physical trace methods, archival research methods, content analysis)
5. 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
6. Other Research Designs
   a. Single-Case Research Design
   b. Quasi-Experimental Designs
7. Program Evaluation
   a. Characteristics of true experiments and quasi-experiments

Methods of Instruction

Methods of Instruction

Types	Examples of learning activities
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

Instructor-Initiated Online Contact Types

Announcements/Bulletin Boards
Chat Rooms
Discussion Boards
E-mail Communication
Telephone Conversations
Video or Teleconferencing

Student-Initiated Online Contact Types

Chat Rooms
Discussions
Group Work

Course design is accessible

Yes

Methods of Evaluation

Methods of Evaluation

Types	Examples of classroom assessments
Exams/Tests	Multiple-choice and essay 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.
Quizzes	Multiple-choice
Essays/Papers	Research Projects - research paper written in APA format.
Other	Written assignments in APA format (6 to 12 pages in length) are required for this course.

Assignments

Reading Assignments

For example:

1. Read Chapter 3 of the Cozby 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

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?

SECTION F - Textbooks and Instructional Materials

Material Type

Textbook

Author
Morling, B

Title
Research Methods in Psychology

Edition/Version
3rd

Publisher
Norton

Year
2017

Material Type
Textbook

Author
Lewandowski, G., Ciarocco, N., & Strohmetz, D

Title
Discovering the Scientist Within

Edition/Version
2nd

Publisher
Macmillan

Year
2019

Material Type
Manual

Author
American Psychological Association

Title
The Publication Manual of the American Psychological Association, 7th edition

Publisher
American Psychological Association

Year
01-01-2019

Course Codes (Admin Only)

ASSIST Update
No

CB00 State ID
CCC000547030

CB10 Cooperative Work Experience Status
N - Is Not Part of a Cooperative Work Experience Education Program

CB11 Course Classification Status
Y - Credit Course

CB13 Special Class Status
N - The Course is Not an Approved Special Class

CB23 Funding Agency Category
Y - Not Applicable (Funding Not Used)

CB24 Program Course Status
Program Applicable

Allow Pass/No Pass
No

Only Pass/No Pass
No