

### Course Outline

**COURSE:** PSYC 32                      **DIVISION:** 10                      **ALSO LISTED AS:** ANTH 32 & POLS 32

**TERM EFFECTIVE:** Spring 2020

**CURRICULUM APPROVAL DATE:** 12/10/2019

**SHORT TITLE:** INTRO TO RESEARCH METHODS

**LONG TITLE:** Introduction to Research Methods

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
3	18	Lecture:	3	54
		Lab:	0	0
		Other:	0	0
		Total:	3	54

#### **COURSE DESCRIPTION:**

An overview of the methodologies used in experimental, quasi-experimental, and non-experimental research in psychology. Students will learn how to design and conduct research, including formulating hypotheses, reviewing the literature, evaluating ethical issues, selecting methodologies, organizing data, applying statistics, and writing reports. This course is also listed as ANTH 32 and POLS 32. **PREREQUISITE:** PSYC 10 with a grade or "C" or better and MATH 5 with a grade of "C" or better.

#### **PREREQUISITES:**

- Completion of PSYC 10, as UG, with a grade of C or better.
- AND Completion of MATH 5, as UG, with a grade of C or better.

#### **COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

#### **GRADING MODES**

- L - Standard Letter Grade

**REPEATABILITY:** N - Course may not be repeated

#### **SCHEDULE TYPES:**

- 02 - Lecture and/or discussion
- 05 - Hybrid
- 72 - Dist. Ed Internet Delayed

## **STUDENT LEARNING OUTCOMES:**

By the end of this course, a student should:

1. Explain the basic principles of the scientific method.
2. Understand the relationship between social theory and research.
3. Critically evaluate research findings in terms of quality, credibility, and applicability.
4. Conceptualize and operationalize social variables in formulating testable hypotheses.
5. Examine various research designs and the role of quantitative and qualitative techniques in social science analyses.
6. Describe how social research can be used to make informed decisions.

## **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 12/10/2019

Week 1 (3 Hours Content): Overview of Social Science Research

Student Performance Objectives (SPO): Students will describe the history and development of empirical study in the social sciences. Students will identify, examine, and describe the sources of research ideas and questions, and the goals of social science research. Students will examine the general pitfalls to avoid in social science research.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 2 (3 Hours Content):

Explanation in Scientific Social Science Research

Student Performance Objectives (SPO): Students will explain the basic scientific and nonscientific approaches to social science research as well as the basic principles of the scientific method and its goals. Students will contrast induction and deduction. Students will define what a paradigm, theory and a hypothesis is, and formulate and test hypotheses. Students will explain indexing and scale construction.

Out-Of-Class Assignments: Read the textbook chapter on this topic, research paper, and writing assignments.

Week 3 (3 Hours Content):

Exploring the Literature in Social Science Research.

Student Performance Objectives (SPO): Students will demonstrate how a literature search is done. Students will describe the various parts of an article. Students will evaluate peer-reviewed literature.

Out-Of-Class Assignments: Read the textbook chapter on this topic, research paper, and writing assignments.

Week 4 (3 Hours Content):

Conducting Ethical Social Science Research

Student Performance Objectives (SPO): Students will examine and explain the importance of research ethics in conducting research on humans and animals, and explain the arguments for and against research with animals. Students will define such terms as informed consent, deception, and confidentiality. Students will describe the APA ethical standards and institutional requirements for conducting research.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 5 (3 Hours Content): Observations in Social Science

Research

Student Performance Objectives (SPO): Students will define what a sample is. Students will compare and contrast observational/sampling methods such as naturalistic/unobtrusive observations measures of research, case study, survey research, field research, evaluation research, and describe their rationale. Students will describe conceptualization and operationalization of measurement.

Students will describe the impact of reactivity, demand characteristics, expectancy effects, and the various biases in observational methods.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 6 (3 Hours Content): Relational Research

Student Performance Objectives (SPO): Students will analyze, describe, and interpret causal and correlational relationships, and their limits.

Out-Of-Class Assignments: Read the textbook chapter on this topic, research paper, and writing assignments.

Week 7 (3 Hours Content): The Basics of Experimentation

Student Performance Objectives (SPO): Students will describe what an experiment is, and its advantages. Students will contrast independent, dependent, and control variables. Students will describe the sources of experimental error.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 8 (3 Hours Content): Validity and Reliability in Social Science Research

Student Performance Objectives (SPO): Students will describe the levels of measurement. Students will define predictive, construct, external, and internal validity, and describe their importance in social science research. Students will define the various types of reliability and their importance in conducting social science research. Students will describe meta-analysis.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 9 (4 Hours Content): Experimental Design

Student Performance Objectives (SPO): Students will identify, describe, employ, and analyze various experimental designs, and identify the reasons to choose particular experimental designs depending on the type of social science research. Students will describe the limitations of experimental methods.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 10 (3 Hours Content): Experimental Design (continued)

Student Performance Objectives (SPO): Students will explain how to select appropriate statistical tests such as chi-square, correlation, t-tests, and ANOVA depending on the type of psychological research. Students will describe main and interaction effects using both tables and graphs. Students will define carryover effects, counterbalancing, and practice effects.

Out-Of-Class

Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 11 (3 Hours Content): Complex Design

Student Performance Objectives (SPO): Students will identify, examine, and describe more complex experimental designs such as factorial, complex within-subjects, and mixed.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 12 (3

Hours Content): Small-n Experimentation

Student Performance Objectives (SPO): Students will identify and describe small-n designs such as the AB, ABA, alternating-treatments, multiple baseline, and changing-criterion.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 13 (3 Hours Content): Quasi-Experimentation

Student Performance Objectives (SPO):

Students will examine and describe the single-case research design, and the characteristics of true experiments and quasi-experiments.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 14 (3 Hours Content): Quasi-Experimentation (continued)

Student Performance Objectives (SPO): Students will examine and describe internal validity in quasi-experimental experiments.

Out-Of-Class Assignments: Read the textbook chapter on this topic, and writing assignments.

Week 15 (3 Hours Content): Interpreting the Results of Social Science Research

Student Performance Objectives (SPO): Students will differentiate between qualitative and quantitative analysis of data, and demonstrate familiarity with current statistical software for

conducting research. Students will demonstrate ability to critically interpret/evaluate research results.

Out-Of-Class Assignments: Read the textbook chapter on this topic, research paper, and writing assignments.

Week 16 (3 Hours Content): Interpreting the Results of Social Science Research (continued)

Student Performance Objectives (SPO): Students will assess the generalizability of social science research study results. Students will identify and describe the issues related to scale attenuation, regression artifacts, and converging operations.

Week 17 (3 Hours Content): Presenting

Research Results

Student Performance Objectives (SPO): Students will compose a body of research findings. Students will demonstrate proficiency in APA style. Students will describe the steps in

publishing an article, how to give an oral presentation, and how to give a poster presentation.

Out-Of-Class Assignments: Read the textbook chapter on this topic, research paper, and writing assignments.

Week 18 (2 hours): Final

### **METHODS OF INSTRUCTION:**

--Weekly readings --Narrated lectures --Video tutorials and lectures --Discussion forums --Group work around research projects --In-person office hours and/or zoom chats

### **OUT OF CLASS ASSIGNMENTS:**

Required Outside Hours: 30

Assignment Description: Reading assignments

Required Outside Hours: 30

Assignment Description: Writing assignments

Required Outside Hours: 30

Assignment Description: Research projects

Required Outside Hours: 18

Assignment Description: Fieldwork assignments

**METHODS OF EVALUATION:**

Writing assignments

Percent of total grade: 40.00 %

Writing assignments, research projects

Objective examinations

Percent of total grade: 30.00 %

Multiple choice and essay quizzes and exams

Problem-solving assignments

Percent of total grade: 25.00 %

Quizzes

Skill demonstrations

Percent of total grade: 5.00 %

Research presentations

**REPRESENTATIVE TEXTBOOKS:**

Lawrence Neuman. Social Research Methods: Qualitative and Quantitative Approaches, 8th edition. New York, NY: Pearson, 2020.

ISBN: 9780135719732

Reading Level of Text, Grade: Grade 14 Verified by: Dana Young

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

GAV A1, effective 202030

GAV A2, effective 202030

GAV A3, effective 202030

CSU GE:

CSU A1, effective 202030

CSU A2, effective 202030

CSU A3, effective 202030

CSU TRANSFER:

Transferable CSU, effective 202030

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: PSYC

CSU Crosswalk Course Number: 32

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: E

Maximum Hours: 3

Minimum Hours: 3

Course Control Number: CCC000558728

Sports/Physical Education Course: N

Taxonomy of Program: 200100