

**College of San Mateo
Official Course Outline**

1. **COURSE ID:** PSYC 105 **TITLE:** Experimental Psychology
Units: 3.0 units **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours
Method of Grading: Grade Option (Letter Grade or Pass/No Pass)
Prerequisite: PSYC 100
Recommended Preparation:
 PSYC 121

2. **COURSE DESIGNATION:**
Degree Credit
Transfer credit: CSU; UC
AA/AS Degree Requirements:
 CSM - GENERAL EDUCATION REQUIREMENTS: E5a. Natural Science
 CSM - GENERAL EDUCATION REQUIREMENTS: E5b. Social Science
CSU GE:
 CSU GE Area B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING: B2 - Life Science
 CSU GE Area D: SOCIAL SCIENCES: DSI - Social Institutions
IGETC:
 IGETC Area 4: SOCIAL AND BEHAVIORAL SCIENCES: Social and Behavioral Sciences

3. **COURSE DESCRIPTIONS:**
Catalog Description:
 Philosophy and aims of scientific inquiry and its application to questions in psychology. Students conduct experiments using methods discussed.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
 Upon successful completion of this course, a student will meet the following outcomes:
 1. Identify and distinguish theoretical approaches to the study of psychology;
 2. Identify and distinguish strengths and weakness of scientific method as applied to examination of issues in psychology;
 3. Identify and distinguish primary models describing topics examined in psychology;
 4. Apply theory and models in psychology to real world concerns;
 5. Describe the methods used to study behavior and mental processes;
 6. Use scientific terminology in reference to cognitive aspects of behavior and mental processes;
 7. Identify aspects of information processing model of behavior and mental processes;
 8. Describe how theory and application of theory in the experimental setting alter predictions made by information processing models;

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
 Upon successful completion of this course, a student will be able to:
 1. Identify and distinguish theoretical approaches to the study of psychology;
 2. Identify and distinguish strengths and weakness of scientific method as applied to examination of issues in psychology;
 3. Identify and distinguish primary models describing topics examined in psychology;
 4. Apply theory and models in psychology to real world concerns;
 5. Describe the methods used to study behavior and mental processes;
 6. Use scientific terminology in reference to cognitive aspects of behavior and mental processes;
 7. Identify aspects of information processing model of behavior and mental processes;
 8. Describe how theory and application of theory in the experimental setting alter predictions made by information processing models;
 9. Work in group setting to develop and conduct scientific experiments concerned with behavior and mental processes
 10. Communicate research results in a clear and concise oral presentation

6. **COURSE CONTENT:**
Lecture Content:
 1. How to Make Orderly Observations.

2. How to Do Experiments.
3. How to Get An Experimental Idea.
4. How to Be Fair with Participants.
5. How to be Fair with Science.
6. How to Find Out What Has Been Done.
7. How to Decide Which Variables to Manipulate and Measure.
8. How to Decide on a Between-Subjects Versus Within-Subject Design.
9. How to Plan Single-Variable, Multiple-Variable, and Converging Series Experiments.
10. How to Design Research that is not Experimental
11. How to Tell When You Are Ready to Begin.
12. How to Interpret Experimental Results.
13. How to Report Experimental Results.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Discussion
- C. Experiments

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Students write experimental reports in APA style as well as other short written reports.

Reading Assignments:

Weekly readings from the assigned textbooks.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Exams/Tests
- C. Oral Presentation
- D. Quizzes
- E. Research Projects

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Bordens, K. & Barrington, B. *Research designs and methods: A process approach*, 11th ed. McGraw Hill, 2022
- B. Gravetter, F. J. & Forzano, L. *Research methods for the behavioral sciences*, 6th ed. Cengage, 2019
- C. Pajo, B. *Introduction to research methods: A hands-on approach*, 1st ed. SAGE Publications, 2017
- D. Morling, B. *Research methods in psychology: Evaluating a world of information*, 4th ed. W.W. Norton & Company, 2020

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Course Originator: Michelle Mullane