PSYCH 1B Course Outline as of Fall 2006

CATALOG INFORMATION

Title: INTRO/EXPERIMENTAL PSYCH Dept and Nbr: PSYCH 1B

Full Title: Introduction to Experimental Psychology

Last Reviewed: 11/27/2023

| Units | | Course Hours per Week | | Nbr of Weeks | Course Hours Total | |
|---------|------|-----------------------|------|--------------|---------------------------|-------|
| Maximum | 3.00 | Lecture Scheduled | 2.00 | 17.5 | Lecture Scheduled | 35.00 |
| Minimum | 3.00 | Lab Scheduled | 3.00 | 6 | Lab Scheduled | 52.50 |
| | | Contact DHR | 0 | | Contact DHR | 0 |
| | | Contact Total | 5.00 | | Contact Total | 87.50 |
| | | Non-contact DHR | 0 | | Non-contact DHR | 0 |

Total Out of Class Hours: 70.00 Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: **Grade Only**

00 - Two Repeats if Grade was D, F, NC, or NP Repeatability:

Also Listed As:

Formerly:

Catalog Description:

Introduction to research methods in psychology. Principles of research design and analysis. Application of these principles to classroom experiments, surveys, and naturalistic observations.

Prerequisites/Corequisites:

Course Completion of PSYC 1A (or PSYCH 1A)

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: Introduction to research methods in psychology. Principles of research design and analysis. Application of these principles to classroom experiments, surveys, and naturalistic observations. (Grade Only)

Prerequisites/Corequisites: Course Completion of PSYC 1A (or PSYCH 1A)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU; UC. (CAN PSY8)

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

IGETC: Transfer Area Effective: Inactive:

CSU Transfer: Transferable Effective: Fall 1981 Inactive:

UC Transfer: Transferable Effective: Fall 1981 Inactive:

CID:

CID Descriptor: PSY 200 Introduction to Research Methods in Psychology

SRJC Equivalent Course(s): PSYC1B

Certificate/Major Applicable:

Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

Upon completion of this course, the student will be able to:

- 1. Describe the characteristics of the scientific method, and distinguish among nonexperimental and experimental qualitative and quantitative research methods.
- 2. Summarize sources of research ideas, devise research problems, and formulate hypotheses for these research problems.
- 3. Evaluate ethical dilemmas among human and animal research subjects according to the APA Code of Ethics.
- 4. Discriminate between independent and dependent variables when conducting research experiments.
- 5. Define validity and propose methods for controlling the following variables in order to reduce threat of invalidity in a research experiment: extraneous variables, research participants and experimenter effects, and sequencing effect.
- 6. Explain the use of randomization, matching, and counterbalancing techniques for the purpose of achieving research constancy.
- 7. Compare and contrast different research approaches, such as correlational research, surveys, and observational studies.
- 8. Differentiate the different types of single-case designs (e.g. ABA, interaction, multiple baseline, changing-criterion, and single-case) and identify the situations in which each of the single-case designs would be appropriate.
- 9. Design and implement a research project from beginning to end.
- 10. Write a comprehensive research report using the APA (American Psychological Association) format.
- 11. Demonstrate, in a laboratory setting, knowledge and skills in the following areas:
 - a. naturalistic observations

- b. surveys
- c. correlational research
- d. experiments (one-way and/or two-way designs)
- e. factorial design experiments

Topics and Scope:

- 1. Beginning Psychological Research
- 2. Explanation in Scientific Psychology
- 3. Exploring the Literature Psychology
- 4. Observation and Survey in Psychological Research
- 5. Qualitative and Quantitative Research
- 6. Correlation/Relational Research
- 7. Basics of Experimentation
- 8. Validity and Reliability in Research
- 9. Experimental Design
- 10. Complex Design
- 11. Small-n Experimentation
- 12. Quasi-Experimentation
- 13. Conducting Ethical Research
- 14. Interpreting the Results of Research
- 15. Presenting Research Results
- 16. Writing an APA Research Paper

Assignment:

- 1. Carefully read, approximately 20-25 pages per week, and recapitulate assigned material in the textbook and supplements.
- 2. Take at least one midterm exam and one final on lectures, reading concepts and terminology.
- 3. Write at least 3 critical analysis papers, 3 pages in length, on assigned readings and lecture materials.
- 4. Write a term or course research paper approximately 8-12 pages in length for the purpose of integrating research skills, enhancing course knowledge, and improving writing skills.
- 5. Upon the discretion of the instructor, oral presentations and group projects may be assigned.
- 6. Demonstrate in a laboratory setting, knowledge and skills in the following areas:
 - a. naturalistic observations
 - b. surveys
 - c. correlational research
 - d. experiments (one-way and/or two-way designs)
 - e. factorial design experiments

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Course research papers, critical thought essays

Writing 20 - 30%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Q/A Worksheets

Problem solving 10 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Laboratory worksheet questions

Skill Demonstrations 20 - 30%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Fill-in, short answers

Exams 30 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

Oral presentation, group projects

Other Category 10 - 20%

Representative Textbooks and Materials:

Davis, Stephen F.; Smith, Randolph A.

INTRODUCTION TO STATISTICS AND RESEARCH METHODS: BECOMING A PSYCHOLOGICAL DETECTIVE, Prentice Hall, 2005.

Leedy, Paul; Ormrod, Jeanne E.

PRACTICAL RESEARCH: PLANNING AND DESIGN, Prentice Hall, 2005.

Borden, Kenneth S.; Abbot, Bruce B.

RESEARCH DESIGN AND METHODS, McGraw Hill, 2005

Kantowitz, Barry H.; Roediger, Henry L.; Elmes, David G.

EXPERIMENTAL PSYCHOLOGY - UNDERSTANDING PSYCHOLOGY RESEARCH, Thomson-Wadsworth, 2005.

Christensen, Larry B.

EXPERIMENTAL METHODOLOGY, Allyn & Bacon, 2004.

Graziano, Anthony M.; Raulin, Michael L.

RESEARCH METHODS: A PROCESS OF INQUIRY, Allyn & Bacon, 2004.