Number: PSYC G280  TITLE: Research Methods in Psychology

ORIGINATOR: Steven Isonio  EFF TERM: Fall 2011
FORMERLY KNOWN AS: Psychology G185, Introduction to Experimental Psychology
DATE OF OUTLINE/REVIEW: 04-02-2014
CROSS LISTED COURSE: TOP NO: 2001.00
CID: PSY 205B

SEMESTER UNITS: 4.0
HRS LEC: 54.0  HRS LAB: 54.0  HRS OTHER: 0.0
CONTACT HRS TOTAL: 108.0
STUDY NON-CONTACT HRS RECOMMENDED: 108.0

CATALOG DESCRIPTION:
Principles of the scientific method and various research designs (experimental and correlational), will be examined. Students will apply these techniques and complete an original research project.
C-ID PSY 205B

JUSTIFICATION FOR COURSE:

PREREQUISITES:
- PSYC G100: Introduction To Psychology
- MATH G160: Introduction To Statistics

COREQUISITES:

ADVISORIES:

ASSIGNED DISCIPLINES:
Psychology

MATERIAL FEE: Yes [ ] No [X] Amount: $0.00

CREDIT STATUS: Noncredit [ ] Credit - Degree Applicable [X] Credit - Not Degree Applicable [ ]

GRADING POLICY: Pass/No Pass [X] Standard Letter [X] Not Graded [ ] Satisfactory Progress [ ]

OPEN ENTRY/OPEN EXIT: Yes [ ] No [X]

TRANSFER STATUS: CSU Transferable[ ] UC/CSU Transferable[X] Not Transferable[ ]

BASIC SKILLS STATUS: Yes [ ] No [X]  LEVELS BELOW TRANSFER: Not Applicable

CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable

NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course

OCCUPATIONAL (SAM) CODE: E

REPEATABLE ACCORDING TO STATE GUIDELINES: No [X]  Yes [ ] NUMBER REPEATS:

REQUIRED FOR DEGREE OR CERTIFICATE: No [ ] Yes [X]
Anthropology(Associate in Arts for Transfer)
Associate in Arts: Liberal Arts: Emphasis in Social Behavior and Self-Development(Associate in Arts)
Associate of Arts: Liberal Arts: Emphasis in Social and Behavioral Sciences(Associate in Arts)
Psychology(Associate in Arts for Transfer)
Psychology(Associate in Arts)

GE AND TRANSFER REQUIREMENTS MET:
IGETC Area 4: Social and Behavioral Sciences
4I: Psychology
1. design and conduct observational studies.
2. summarize and critique research reports.
3. identify the design of published research studies.
4. design and develop effective psychological measures.
5. design and produce an original research project and to write a corresponding research paper according to the APA guidelines.
6. understand the purpose of, and properly interpret, various statistical tests used in psychological research.
7. apply appropriate research designs to given situations.
8. critically evaluate the research of others.
9. analyze and interpret data from research studies.
10. demonstrate a knowledge of the scientific method upon written test items.

COURSE OBJECTIVES:
1. demonstrate a knowledge of the scientific method upon written test items.
2. critically evaluate the research of others.
3. apply appropriate research designs to given situations
4. understand the purpose of, and properly interpret, various statistical tests used in psychological research.
5. design and produce an original research project and to write a corresponding research paper according to the APA guidelines.

I Lab Section
I.1. design and develop effective psychological measures.
I.2. identify the design of published research studies.
I.3. summarize and critique research reports.
I.4. design and conduct observational studies.
I.5. analyze and interpret data from research studies.

COURSE CONTENT:

LECTURE CONTENT:
A. The Scientific Method
   1. Assumptions and goals
   2. Other ways of gaining knowledge
B. Measuring Behavior
   1. Scales
   2. Instrumentation
   3. Measures of central tendency and variation
C. Correlation Studies
   1. Purpose and limitations
   2. Gathering data
   3. Statistical analyses
D. Experimental Studies
   1. Purpose, limitations, and pitfalls
   2. Choosing and assigning subjects
   3. Conducting experiments
   4. Complex designs
   5. Quasi-experimental designs
E. Interpreting Results
   1. Generalizing
   2. Statistical tests of significance
   3. Replications
F. Ethical concerns related to research in psychology
G. Writing research papers Lab Content
   1. Instrument Design and Item Scaling
      a. Levels of Measurement
      b. Response Sets and Styles
   2. Experimental Design
      a. Design identification exercises
      b. Design critiques
   3. Experiments & Studies
      a. Group projects: Observational study
      b. Preparation of research proposal
      c. Student-designed experiment
   4. Data Analysis
      a. Descriptive statistics (evaluation and interpretation)
      b. Inferential statistics (evaluation and interpretation)
      c. Correlation and regression analyses, effect size measures
   5. Reading and writing research reports
      a. Structure of a research report
      b. American Psychological Association style

LABORATORY CONTENT:

A. Instrument Design and Item Scaling
   1. Levels of Measurement
   2. Response Sets and Styles
B. Experimental Design
   1. Design identification exercises
   2. Design critiques
C. Experiments & Studies
   1. Group projects: Observational study
   2. Preparation of research proposal
   3. Student-designed experiment
D. Data Analysis
   1. Descriptive statistics (evaluation and interpretation)
   2. Inferential statistics (evaluation and interpretation)
   3. Correlation and regression analyses, effect size measures
E. Reading and writing research reports
   1. Structure of a research report
   2. American Psychological Association style

METHODS OF INSTRUCTION:

A. Lecture:
B. Lab:
C. Online:
D. Independent Study:

INSTRUCTIONAL TECHNIQUES:
COURSE ASSIGNMENTS:
  Reading Assignments
  Textbook
  Websites

  Out-of-class Assignments
  Hands-on experience with instrumentation and with interviews

Writing Assignments
  Required Writing: Research paper proposing a psychological research study.
  Problem-Solving Skills: Analyzing research problems and offering appropriate designs.
  Critical Thinking: critiquing the research designs of others, professional and lay.

METHODS OF STUDENT EVALUATION:
Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Essay Examinations
Objective Examinations
Report
Projects (ind/group)
Problem Solving Exercises
Oral Presentations
Skills Demonstration

  Demonstration of Critical Thinking:
  Critical analyses of published research studies.
  Experimental design.
  Interpretation of results of data analyses.
  Consideration of ethical issues related to research studies.

Required Writing, Problem Solving, Skills Demonstration:
Required Writing: Research paper proposing a psychological research study
Problem-Solving Skills: Analyzing research problems and offering appropriate designs
Critical Thinking: critiquing the research designs of others, professional and lay

TEXTS, READINGS, AND RESOURCES:
TextBooks:

LIBRARY:
  Adequate library resources include: Non-Print Materials
  Comments:

Attachments:
  Attached Files