I. CATALOG INFORMATION
   A. Discipline: PSYCHOLOGY
   B. Subject Code and Number: PSY M06
   C. Course Title: Introduction to Behavioral Research Methods
   D. Credit Course units:
      Units: 3
      Lecture Hours per week: 3
      Lab Hours per week: 0
      Variable Units: No
   E. Student Learning Hours:
      Lecture Hours:
      Classroom hours: 52.5 - 52.5
      Laboratory/Activity Hours:
      Laboratory/Activity Hours 0 - 0
      Total Combined Hours in a 17.5 week term: 52.5 - 52.5
   F. Non-Credit Course hours per week ________
   G. May be taken a total of: X 1 2 3 4 time(s) for credit
   H. Is the course co-designated (same as) another course: No X Yes 
      If YES, designate course Subject Code & Number: ________
   I. Course Description:
      Introduces basic research concepts and principles of behavioral science;
      descriptive and experimental research approaches; problem identification,
      hypothesis formation and testing; experimental variables and controls; validity
      and reliability; experimental, quasi-experimental, and single participant research
      designs; and research ethics. Requires research study and term paper using
      American Psychological Association (APA) guidelines and format.
   J. Entrance Skills
      *Prerequisite: No □ Yes X Course(s)
      PSY M01 and PSY M01H and MATH M15, MATH M15H or
      *Corequisite: No X Yes □ Course(s)
      Limitation on Enrollment: No X Yes 
      Recommended Preparation: No X Yes □ Course(s)
      Other: No X Yes 

### K. Other Catalog Information:

#### II. COURSE OBJECTIVES

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

<table>
<thead>
<tr>
<th></th>
<th>Methods of evaluation will be consistent with, but not limited by, the following types or examples.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>explain the basic principles of the scientific method, including the value of empirical, scientific understanding and how it differs from other methods of acquiring information.</td>
</tr>
<tr>
<td>2</td>
<td>demonstrate proficiency in APA style.</td>
</tr>
<tr>
<td>3</td>
<td>demonstrate knowledge of general research designs, experimental and non-experimental methods, and standard research practices.</td>
</tr>
<tr>
<td>4</td>
<td>develop and test a hypothesis and select appropriate research design to test the hypothesis.</td>
</tr>
<tr>
<td>5</td>
<td>differentiate among several types of validity and reliability, including external, internal, and construct validity.</td>
</tr>
<tr>
<td>6</td>
<td>describe Cook and Campbell’s (1979) major types of confounding variables and how each may be controlled.</td>
</tr>
<tr>
<td>7</td>
<td>critically evaluate research reports, including synthesizing research findings and assessing the generalizability of research results.</td>
</tr>
<tr>
<td>8</td>
<td>explain the ethical treatment of human and animal participants in research and the institutional requirements for conducting research, including an Institutional Review Board (IRB), the APA Code of Ethics, and The Belmont Report requirements.</td>
</tr>
</tbody>
</table>

#### III. COURSE CONTENT
<table>
<thead>
<tr>
<th>Estimated %</th>
<th>Topic</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture (must total 100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00%</td>
<td>Unobtrusive Measures of Behavior (physical trace methods, archival research methods, content analysis)</td>
<td>3, 4, 6, 7</td>
</tr>
<tr>
<td>20.00%</td>
<td>Introduction:</td>
<td>1, 2, 4, 5, 7</td>
</tr>
<tr>
<td></td>
<td>a. Scientific and nonscientific approaches to knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Dependent and independent variables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Validity and reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Scientific method and its goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Causal and correlational relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. Samples and sampling methods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>g. Theoretical and operational definitions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>h. Evaluating peer-reviewed literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i. APA format and style</td>
<td></td>
</tr>
<tr>
<td>10.00%</td>
<td>Ethical Issues in the Conduct of Psychological Research:</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>a. APA ethical standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Risk/benefit ratio of research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Use of deception of research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Human and animal subject use</td>
<td></td>
</tr>
<tr>
<td>15.00%</td>
<td>Descriptive Methods:</td>
<td>3, 4, 6, 7</td>
</tr>
<tr>
<td></td>
<td>a. Observational techniques and rationale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Reactivity, demand characteristics, observer bias, expectancy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>effects, and other biases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Theories, research questions, hypotheses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Interpretation and limits of correlational data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Levels of measurement</td>
<td></td>
</tr>
<tr>
<td>20.00%</td>
<td>Experimental Methods:</td>
<td>3, 4, 6, 7</td>
</tr>
<tr>
<td></td>
<td>a. Independent groups designs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Repeated measures designs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Reasons to use and limitations of experimental methods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Counterbalancing and practice effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Main effects and interaction effects using both table and graph methods</td>
<td></td>
</tr>
<tr>
<td>15.00%</td>
<td>Other Research Designs:</td>
<td>3, 4, 6, 7</td>
</tr>
<tr>
<td></td>
<td>a. Single-case designs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Quasi-experimental designs</td>
<td></td>
</tr>
<tr>
<td>10.00%</td>
<td>Program Evaluation: Characteristics of true experiments and quasi-experiments</td>
<td>3, 4, 5, 6, 7</td>
</tr>
</tbody>
</table>

**IV. TYPICAL ASSIGNMENTS**

**A. Writing assignments**

Writing assignments are required. Possible assignments may include, but are not limited to:

1. analysis of peer-reviewed research reports to determine application of appropriate APA style and organization.
2. research paper describing original research or research design with hypothetical results.
3. exam short answer questions.
4. in-class experiment analysis.

**B. Appropriate outside assignments**
Appropriate outside assignments are required. Possible assignments may include, but are not limited to:

1. assigned topical questions or problems.
2. literature search using appropriate databases.
3. find and analyze articles that demonstrate research techniques.
4. plan research projects.
5. research and analyze peer-reviewed articles.
6. chapter questions or problems.
7. develop group projects with other students.
8. find research examples that demonstrate research techniques.
9. complete assigned readings.

C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:

1. synthesize research results from peer-reviewed research reports.
2. analyze peer-reviewed research reports.
3. apply class content to original research projects.

V. METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

- Distance Education – When any portion of class contact hours is replaced by distance education delivery mode (Complete DE Addendum, Section XV)
- Lecture/Discussion
- Laboratory/Activity
- Other (Specify) Application to real-life behavioral questions
- Optional Field Trips
- Required Field Trips

VI. METHODS OF EVALUATION

Methods of evaluation may include, but are not limited to:

- Essay Exam
- Problem Solving Exam
- Objective Exams
- Classroom Discussion Reports/Papers/Journals Projects
- Skill Demonstration Participation Other (specify)

Research report analysis, applying appropriate research method to behavior question, role-play as experimenter and participant, peer-review of in-class experiments.
VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS


VIII. STUDENT MATERIALS FEES

- [X] No
- [ ] Yes

IX. PARALLEL COURSES

<table>
<thead>
<tr>
<th>College</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC Santa Barbara</td>
<td>PSY 7</td>
<td>Introduction to Experimental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CSU Long Beach</td>
<td>PSY 200</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>UC San Diego</td>
<td>COGS 14B</td>
<td>Design and Analysis of Experiments</td>
<td>4</td>
</tr>
<tr>
<td>UC Davis</td>
<td>PSYCH 41</td>
<td>Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>UC Irvine</td>
<td>SOCECOL 10</td>
<td>Research Design</td>
<td>4</td>
</tr>
</tbody>
</table>

X. MINIMUM QUALIFICATIONS

**Courses Requiring a Masters Degree:**

master’s degree in psychology OR bachelor’s degree in psychology AND master’s degree in counseling, sociology, statistics, neuroscience, or social work OR the equivalent.

XI. ARTICULATION INFORMATION

A. Title V Course Classification:

1. This course is designed to be taken either:
   - [ ] Pass/No Pass only (no letter grade possible); or
   - [X] Letter grade (P/NP possible at student option)

2. Degree status:
   - Either [X] Associate Degree Applicable; or [ ] Non-associate Degree Applicable

B. Moorpark College General Education:

1. Do you recommend this course for inclusion on the Associate Degree General Education list?
   - Yes: [X] No: [ ] If YES, what section(s)?
     - [ ] A1 - Natural Sciences - Biological Science
     - [ ] A2 - Natural Sciences - Physical Science
     - [ ] B1 - Social and Behavioral Sciences - American History/Institutions
     - [X] B2 - Social and Behavioral Sciences - Other Social Behavioral Science
C. California State University (CSU) Articulation:

1. Do you recommend this course for transfer credit to CSU? Yes: X No: □

2. If YES do you recommend this course for inclusion on the CSU General Education list? Yes: X No: □ If YES, which area(s)?
   
   A1 □ A2 □ A3 □ B1 □ B2 □ B3 □ B4 □
   C1 □ C2 □ D1 □ D2 □ D3 □ D4 □ D5 □
   D6 □ D7 □ D8 □ D9 X □ D10 □ E □

D. University of California (UC) Articulation:

1. Do you recommend this course for transfer to the UC? Yes: X No: □

2. If YES do you recommend this course for the Intersegmental General Education Transfer Curriculum (IGETC)? Yes: X No: □

   IGETC Area 1: English Communication
   □ English Composition
   □ Critical Thinking-English Composition
   □ Oral Communication

   IGETC Area 2: Mathematical Concepts and Quantitative Reasoning
   □ Mathematical Concepts

   IGETC Area 3: Arts and Humanities
   □ Arts
   □ Humanities

   IGETC Area 4: Social and Behavioral Sciences
   □ Anthropology and Archaeology
   □ Economics
   □ Ethnic Studies
   □ Gender Studies

   □
A. Sequential course within a discipline.

1. Apply principles of scientific research and understand the role of

[ ] Geography
[ ] History
[ ] Interdisciplinary, Social & Behavioral Sciences
[ ] Political Science, Government & Legal Institutions
[ ] Psychology
[ ] Sociology & Criminology

IGETC Area 5: Physical and Biological Sciences (mark all that apply)

[ ] Physical Science Lab or Physical Science Lab only (none-sequence)
[ ] Physical Science Lecture only (non-sequence)
[ ] Biological Science
[ ] Physical Science Courses
[ ] Physical Science Lab or Biological Science Lab Only (non-sequence)
[ ] Biological Science Courses
[ ] Biological Science Lab course
[ ] First Science course in a Special sequence
[ ] Second Science course in a Special Sequence
[ ] Laboratory Activity
[ ] Physical Sciences

IGETC Area 6: Language other than English

[ ] Languages other than English (UC Requirement Only)
[ ] U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)
[ ] U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

XII. REVIEW OF LIBRARY RESOURCES

A. What planned assignment(s) will require library resources and use?

The following assignments require library resources:
1. Research projects using books, print and online journals, and/or reference materials.
2. Computer-lab use
3. Research using the Library's print and online resources including specialized databases such as EBSCO's PsychARTICLES.

B. Are the currently held library resources sufficient to support the course assignment?

YES: [ ] NO: [ ]

If NO, please list additional library resources needed to support this course.

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

Requisite Justification for PSY M01

[ ] A. Sequential course within a discipline.
1. Apply principles of scientific research and understand the role of
reviewing scientific evidence throughout the study of human behavior.

2. Analyze the relationship between human behavior and neurological functioning.

3. Recognize major developmental stages in physical development, human cognition, and emotional development.

4. Distinguish between “altered” and “waking” consciousness and understand components of stages of sleep.

5. Understand the interaction of physical, cultural, and social influences in the development of human sexuality.


7. Explain current models of memory and the role of brain functioning.

8. Compare and contrast major personality theories, including psychoanalytic (Freudian), social learning, and trait factor theories.

9. Analyze the effect of stress on physical functioning and factors that influence resilience.

10. Identify factors used to establish “abnormal behavior,” understand the classification system of the DSM-IV-TR, and list criteria for the most common disorders (such as Mood Disorders, Anxiety Disorders, and Schizophrenia.)

11. List treatment options for the above disorders.

12. Explain how social psychology principles influence such attitudes and behaviors as obedience, conformity, prejudice, aggression, and prosocial behavior.

13. Identify key theorists and their contributions to each of the above areas.

14. SERVICE LEARNING OBJECTIVES (optional): Recognize how principles of psychology (such as determining abnormality, child development, group interaction, and/or learning) interact through volunteer work in an organization that works with people.

15. Explain perspectives of human behavior during consecutive historical eras.

☐ B. Standard Prerequisite or Corequisite required by universities.

☐ C. Corequisite is linked to companion lecture course.

☐ D. Prerequisite or Corequisite is authorized by legal statute or regulation.
Code Section: __________

☐ E. Prerequisite or Corequisite is necessary to protect the students' health and safety.

☐ F. Computation or communication skill is needed.

☐ G. Performance courses: Audition, portfolio, tryouts, etc. needed.

and

Requisite Justification for PSY M01H

X A. Sequential course within a discipline.
1. Explain perspectives of human behavior during consecutive historical eras.

2. Apply principles of scientific research and understand the role of reviewing scientific evidence throughout the study of human behavior.

3. Analyze the relationship between human behavior and neurological functioning.

4. Recognize major developmental stages in physical development, human cognition, and emotional development.

5. Distinguish between “altered” and “waking” consciousness and understand components of stages of sleep.

6. Understand the interaction of physical, cultural, and social influences in the development of human sexuality.

7. Differentiate among three types of learning: classical conditioning, operant conditioning, and observational learning.

8. Explain current models of memory and the role of brain functioning.

9. Compare and contrast major personality theories, including psychoanalytic (Freudian), social learning, and trait factor theories.

10. Analyze the effect of stress on physical functioning and factors that influence resilience.

11. Identify factors used to establish “abnormal behavior,” understand the classification system of the DSM-IV-TR, and list criteria for the most common disorders (such as Mood Disorders, Anxiety Disorders, and Schizophrenia.)

12. List treatment options for the above disorders.

13. Explain how social psychology principles influence such attitudes and behaviors as obedience, conformity, prejudice, aggression, and
prosocial behavior.

14. Identify key theorists and their contributions to each of the above areas.

15. HONORS OBJECTIVES: Analyze the contributions of key psychological theorists to one or more major fields in psychology through evaluation of primary source writings.

16. HONORS OBJECTIVES: Synthesize the interaction of genetic, environmental, and/or social-cultural influences on one or more human behaviors.

17. HONORS OBJECTIVES: Compare and contrast current trends in psychological research with historical approaches to psychology.

18. HONORS OBJECTIVES: Evaluate how famous experiments in psychology can be applied to multiple areas of human behavior.

19. SERVICE LEARNING OBJECTIVE (optional): Recognize how principles of psychology (such as determining abnormality, child development, group interaction, and/or learning) interact through volunteer work in an organization that works with people.

20. HONORS SERVICE LEARNING OBJECTIVE (optional): Analyze and integrate how principles of psychology (such as determining abnormality, child development, group interaction, and/or learning) interact through volunteer work in an organization that works with people.

☐ B. Standard Prerequisite or Corequisite required by universities.

☐ C. Corequisite is linked to companion lecture course.

☐ D. Prerequisite or Corequisite is authorized by legal statute or regulation.

Code Section: _________

☐ E. Prerequisite or Corequisite is necessary to protect the students' health and safety.

☐ F. Computation or communication skill is needed.

☐ G. Performance courses: Audition, portfolio, tryouts, etc. needed.

and

Requisite Justification for MATH M15

☐ A. Sequential course within a discipline.
B. Standard Prerequisite or Corequisite required by universities.
   CSU Chico, CSU Fullerton, CSU LB, CSU Northridge

C. Corequisite is linked to companion lecture course.

D. Prerequisite or Corequisite is authorized by legal statute or regulation.
   Code Section: ________

E. Prerequisite or Corequisite is necessary to protect the students' health and safety.

F. Computation or communication skill is needed.

G. Performance courses: Audition, portfolio, tryouts, etc. needed.

Requisite Justification for MATH M15H
   A. Sequential course within a discipline.

B. Standard Prerequisite or Corequisite required by universities.
   CSU Chico, CSU Fullerton, CSU LB, CSU Northridge

C. Corequisite is linked to companion lecture course.

D. Prerequisite or Corequisite is authorized by legal statute or regulation.
   Code Section: ________

E. Prerequisite or Corequisite is necessary to protect the students' health and safety.

F. Computation or communication skill is needed.

G. Performance courses: Audition, portfolio, tryouts, etc. needed.

or

XIV. WORKPLACE PREPARATION

PSY M06: Not Applicable
XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

1. Mode of Delivery

- [X] Online (course will be delivered 100% online)
- [X] Online with onsite examinations (100% of the instruction will occur online, but examinations and an orientation will be scheduled onsite)
- [X] Online/Hybrid (a percentage of instruction will be held online and the remaining percentage of instruction will be held onsite)
  - Lab activities will be conducted onsite
- [ ] Televideo (Examinations and an orientation will be held onsite)
- [ ] Teleconference
- [ ] Other

2. Need/Justification

Improve General Student Access

3. Describe how instructors teaching this course will ensure regular, effective contact with and among students.

On-site orientation
Email
Chat rooms/Discussion Boards

4. Describe how instructors teaching this course will involve students in active learning.

5. Explain how instructors teaching this course will provide multiple methods of content representation.

6. Describe how instructors teaching this course will evaluate student performance.

On-site testing (midterm, final, etc.)

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

PSY M06: Not Applicable

XVII. STUDENT MATERIALS FEE ADDENDUM

PSY M06: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

PSY M06: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:
- Discipline: PSYCHOLOGY
- Discipline Code and Number: PSY M06
- Course Revision Category: Substantial Course Revision

Course Proposed By: