CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS COURSE MODIFICATION PROPOSAL Courses must be submitted by October 15, 2010, and finalized by the end of the fall semester to make the next catalog (2011-12) production

DATE (CHANGE DATE EACH TIME REVISED): OCTOBER 14, 2010; REV 12.14.10 PROGRAM AREA(S): PSYCHOLOGY

Directions: All of sections of this form must be completed for course modifications. Use YELLOWED areas to enter data. All documents are stand alone sources of course information.

1. Course Information.

[Follow accepted catalog format.] (Add additional prefixes i f cross-listed)

OLDPrefix PSY Course# 301 Title PSYCHOLOGICALPrefix PSY CRESEARCH AND STATISTICAL METHODS IIRESEARCH ANDUnits (3)Units (4)2 hours lecture per week3 hours lecture per

2 hours activity per week

X Prerequisites: PSY 300

Consent of Instructor Required for Enrollment Corequisites:

Catalog Description (Do not use any symbols): A continuation of PSY 300. Advanced research methodology and within the empirical framework in the behavioral sciences. Topics include how to apply the scientific method within the field of psychology and the social sciences, ethical guidelines and issues related to the research in, and practice of, psychology, how to evaluate research and popular claims in psychology with a critical eye, and computer applications related to statistics and research. Coursework on inferential and descriptive statistical methods will build on material from PSY 300.

Creded

NEW

Prefix PSY Course# 301 Title PSYCHOLOGICAL RESEARCH AND STATISTICAL METHODS II Units (4) 3 hours lecture per week 2 hours activity per week

X Prerequisites: PSY 300

Consent of Instructor Required for Enrollment Corequisites:

Catalog Description (Do not use any symbols): A continuation of PSY 300. Advanced research methodology and within the empirical framework in the behavioral sciences. Topics include how to apply the scientific method within the field of psychology and the social sciences, ethical guidelines and issues related to the research in, and practice of, psychology with a critical eye, and computer applications related to statistics and research. Coursework on inferential and descriptive statistical methods will build on material from PSY 300

Creded

(Provided by the Dean)

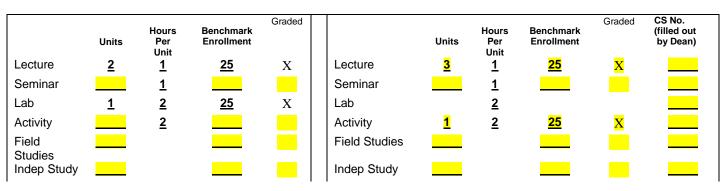
| | | Graded | | • | Graded | |
|---------------|---------------------|-----------------|---------------|---------------------|--------------------|--------------------|
| Gen | eral Education | CR/NC | Repeatable | General Education | CR/NC | Repeatable for |
| Categories | | for up to units | Categories | | up to units | |
| | Lab Fee Requested | X A - F | Total | Lab Fee Requested | X A - F | Total |
| | | | Completions | | | Completions |
| Course Level: | | Optional | Multiple | Course Level: | | Multiple |
| Χu | Indergraduate | (Student's | Enrollment in | X Undergraduate | Optional | Enrollment in same |
| | Post-bac/Credential | choice) | same semester | Post-bac/Credential | (Student's choice) | semester |
| | Graduate | | | Graduate | choice) | |

2. Mode of Instruction (Hours per Unit are defaulted)

Existing

Hegis Code(s)_

(P Proposed



Other blank

3. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: http://summit.csuci.edu/geapproval. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing. A (English Language, Communication, Critical Thinking) A-1 Oral Communication A-2 English Writing A-3 Critical Thinking B (Mathematics, Sciences & Technology) **B-1** Physical Sciences B-2 Life Sciences – Biology **B-3** Mathematics – Mathematics and Applications **B-4** Computers and Information Technology C (Fine Arts, Literature, Languages & Cultures) C-1 Art C-2 Literature Courses C-3a Language C-3b Multicultural **D** (Social Perspectives) E (Human Psychological and Physiological Perspectives) **UDIGE/INTD Interdisciplinary Meets University Writing Requirement** Meets University Language Requirement American Institutions, Title V Section 40404: Government US Constitution US History

Other blank

Refer to website, Exec Order 405, for more information: <u>http://senate.csuci.edu/comm/curriculum/resources.htm</u> Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

4. Justification and Requirements for the Course. [*Make a brief statement to justify the need for the course*]

OLD

This is a required course for Psychology majors. In this course, students will develop the collaborative, research, and writing skills needed to conduct and present an original, ethical psychological experiment.

X Requirement for the Major/Minor Elective for the Major/Minor Free Elective

NEW

This is a required course for Psychology majors. In this course, students will develop the collaborative, research, and writing skills needed to conduct and present an original, ethical psychological experiment.

X Requirement for the Major/Minor

Elective for the Major/Minor

Free Elective

Submit Program Modification if this course changes your program.

5. Student Learning Outcomes. (List in numerical order. You may wish to visit resource information at the following website: http://senate.csuci.edu/comm/curriculum/resources.htm)

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

1. Read, understand, and critically evaluate research reports published in psychological journals on the basis of its construct validity, internal validity, external validity, statistical validity, and conformity to APA's ethical principles.

2. Develop testable hypotheses derived from a theory.

3. Identify and apply various research designs in new situations.

4. Create and critique questionnaires/survey instruments.

5. Design and conduct a well-controlled experiment.

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

1. Read, understand, and critically evaluate research reports published in psychological journals on the basis of its construct validity, internal validity, external validity, statistical validity, and conformity to APA's ethical principles.

2. Develop testable hypotheses derived from a theory.

3. Identify and apply various research designs in new situations.

4. Create and critique questionnaires/survey instruments.

5. Design and conduct a well-controlled experiment.

6. Identify which statistical analyses are appropriate for various experimental designs.

7. Use statistical software (SPSS) to analyze data.

8. Interpret and draw conclusions from descriptive and inferential statistical analyses.

9. Apply the experimental method to answer questions about behavior through participation in laboratory exercises and experiments.

10. Develop necessary skills for an efficient review of the psychological literature using a computerized index (PsycInfo).11. Prepare written reports according to the stylistic conventions of the American Psychological Association.

6. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary) OLD NEW

- Need for quantitative methods in science in general and psychology in specific
- Scientific and statistical methods as ways to reason inductively and deductively about human behavior
- The research process
- Selecting a problem and reviewing the research
- Sampling and generalizability
- Measurement, reliability, and validity
- Methods of measuring behavior
- Data collection and descriptive statistics
- Descriptive, historical and correlational methods of research and appropriate data analysis strategies
- Qualitative methods and appropriate data analysis strategies
- Experimental research methods and appropriate data analysis strategies
- Quasi-experimental research methods and appropriate data analysis strategies
- Writing a research proposal
- Writing a research manuscript

6. Identify which statistical analyses are appropriate for various experimental designs.

7. Use statistical software (SPSS) to analyze data.

8. Interpret and draw conclusions from descriptive and inferential statistical analyses.

9. Apply the experimental method to answer questions about behavior through participation in laboratory exercises and experiments.

10. Develop necessary skills for an efficient review of the psychological literature using a computerized index (PsycInfo).11. Prepare written reports according to the stylistic conventions of the American Psychological Association.

• Need for quantitative methods in science in general and psychology in specific

- Scientific and statistical methods as ways to reason inductively and deductively about human behavior
- The research process
- Selecting a problem and reviewing the research
- Sampling and generalizability
- Measurement, reliability, and validity
- Methods of measuring behavior
- Data collection and descriptive statistics
- Descriptive, historical and correlational methods of research and appropriate data analysis strategies
- Qualitative methods and appropriate data analysis strategies
- Experimental research methods and appropriate data analysis strategies
- Quasi-experimental research methods and appropriate data analysis strategies
- Writing a research proposal
- Writing a research manuscript

Does this course content overlap with a course offered in your academic program? Yes _____ No X If YES, what course(s) and provide a justification of the overlap.

Does this course content overlap a course offered in another academic area? Yes _____ No X If YES, what course(s) and provide a justification of the overlap.

Overlapping courses require Chairs' signatures.

7. Cross-listed Courses (Please note each prefix in item No. 1)

- A. List cross-listed courses (Signature of Academic Chair(s) of the other academic area(s) is required).
- B. List each cross-listed prefix for the course:
- C. Program responsible for staffing:

8. References. [Provide 3-5 references]

OLD American Psychological Association. (2002). Publication manual of the American Psychological Association (5th ed.). Washington, DC: Author.

George, D., & Mallery, P. (2002). SPSS for Windows step by step: A simple guide and reference (4th ed.). New York: Allyn & Bacon.

McBurney, D. H. (2002). How to think like a Psychologist: Critical thinking in Psychology. New Jersey: Prentice-Hall.

Myers, A., & Hansen, C. (1997). Experimental psychology (4th ed.). Pacific Grove, CA: Brooks/Cole Publishing Salkind, N. J. (2002). Exploring research (5th ed). New Jersey: Prentice-Hall.

| NEW | Jackson, S. L. (2009). Research Methods and Statistics: A Critical Thinking Approach, 3 rd Edition. Belmont, CA: |
|-----|---|
| | Thompson/Wadsworth. |
| | Stanovich, K. E. (2010). How to Think Straight about Psychology, 9 th Edition. Boston, MA: Allyn & Bacon. |
| | American Psychological Association (2009). Publication Manual of the American Psychological Association, 6 th |
| | Edition. Washington, DC: Author. |
| | Howell, D. C. (2004). Fundamental Statistics for the Behavioral Sciences, 5th Edition. Belmont, CA: Brooks/Cole- |
| | Thomson Learning. |
| | Stern, L. (2010). <u>A Visual Approach to SPSS for Windows: A Guide to SPSS 17.0, 2nd Edition</u> . Boston, MA: |
| | Allyn & Bacon. |
| | |

- 9. Tenure Track Faculty qualified to teach this course. All Psychology tenure track faculty
- 10. Requested Effective Date or First Semester offered: Fall 2011
- 11. New Resource Requested: Yes No X If YES, list the resources needed.
 - A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)
 - B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)
 - C. Facility/Space/Transportation Needs:
 - D. Lab Fee Requested: Yes No (Refer to the Dean's Office for additional processing)
 - E. Other.
- 12. Indicate Changes and Justification for Each. [Check all that apply and follow with justification. Be as brief as possible but,

| use as much space as necessary.] | | | | |
|----------------------------------|--|--|--------------------------|--|
| | Course title | | Course Content | |
| | Prefix/suffix | | Course Learning Outcomes | |
| | Course number | | References | |
| ХU | Inits | | GE | |
| | Staffing formula and enrollment limits | | Other | |
| | Prerequisites/Corequisites | | Reactivate Course | |
| X Catalog description | | | | |

X Mode of Instruction

Justification:

- In the proposed course modification, we request to increase the number of units for the lecture section from 3 units (2 hours) to 4 units (3 hours). The existing two-hour lecture per week does not provide sufficient time to cover the vast research methodologies as well as statistical concepts and applications that are typically found in upper division Research and Statistical Methods courses. More importantly, in order to meet the learning outcomes for this course, students are required to become proficient in the following main areas: (a) statistical computations; (b) application of statistics and research methods to create empirical studies; (c) critically review and evaluate research in the field to produce better study designs; (d) write a research proposal; (e) present findings; and (d) write a research manuscript. This type of activity-based learning technique, coupled with the rigorousness of the materials, would necessitate three hours or more of course lecture time. As stated in Item #6, only the mode of delivery and not the content of the course will be modified for this proposal.
- 2. The catalog description will be revised to match the above-mentioned modification. No other changes will be made.

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes No X

If, YES attach a program update or program modification form for all programs affected. Priority deadline for New Minors and Programs: October 4, 2010 of preceding year. Priority deadline for Course Proposals and Modifications: October 15, 2010. Last day to submit forms to be considered during the current academic year: April 15th.

Kimmy Kee-Rose



Harley Baker Kevin Volkan Proposer(s) of Course Modification Type in name. Signatures will be collected after Curriculum approval.

Date

Approval Sheet

Course:

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

| Program Chair | | |
|---|---------------|------|
| | Signature | Date |
| Program Chair | | |
| | | |
| | Signature | Date |
| Program Chair | | |
| | Signature | Date |
| General Education Chair | | |
| | Signature | Date |
| Center for Intl Affairs Director | | |
| | Signature | Date |
| Center for Integrative Studies Director | | |
| | Signature | Date |
| Center for Multicultural Engagement Director | | |
| | Signature | Date |
| Center for Civic Engagement | | |
| and Service Learning Director | Ciana atu ura | Dete |
| | Signature | Date |
| Curriculum Chair | | |
| | Signature | Date |
| Dean of Faculty | | |
| | Signature | Date |