

SYLLABUS
Psychology 200: Methods in Empirical Psychology
California State University, Sacramento
Department of Psychology
Spring 2008

Instructor:	Rebecca Cameron, Ph.D.	Office Hours:	Tuesdays & Thursdays 3-4 PM
Office:	Amador 353C		Wednesdays 7-8 PM
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Course meeting time: Wednesdays 4:00-6:50 PM
Course location: Amador 362

Description of the course (from course catalog): Philosophy of science, critical thinking in the design of research studies, and professional issues. Topics include: nature of science; observational, experimental, and case study designs; formulating research questions; measurement strategies; scaling and coding; internal and external validity; naturalism in research; quasi-experiments; archival research; physical traces; data collection; interpreting results; program evaluation; professional writing; and ethics.

Prerequisites: Students must have successfully completed Psychology 8, 101, and 102.

Required course text:

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Whitley, B. E. (2002). *Principles of research in behavioral science* (2nd ed.). New York, NY: McGraw-Hill.

In addition, specific shorter readings will be assigned by the instructor and/or by classmates preparing to present a topic. You will also be responsible for locating and reading articles independently in order to complete assigned work. It is **expected** that you will read the assigned material **before** attending lectures on a particular topic. This will be essential to class discussion. In order to facilitate illustration of the material, class and small group discussion, and efficiency in your project work this semester, we will focus on one or a few content areas within the psychological literature as a source of articles.

COURSE REQUIREMENTS:

Attendance, promptness, and participation: Attendance is required; roll will be taken. Please discuss with the professor any unavoidable absences **prior** to the class session affected. Participation will be evaluated and constitutes 10% of your final grade. Excess absences are one factor in lowering participation grades.

Classroom environment: Pagers and cell phones can be highly disruptive to the classroom. Please switch these devices to “vibrate only” or off. If you must respond to a page or call (i.e., in an emergency), please step out of the classroom. Frequent interruptions of this kind will be addressed by the instructor.

Need for Accommodation: If you have a disability and require accommodations, you need to provide disability documentation to Services to Students with Disabilities (SSWD), Lassen Hall 1008, (916) 278-6955. If you have a documented disability and verification from SSWD, and wish to discuss academic accommodations, please contact the instructor as soon as possible.

Academic honesty: You are expected to be honest in your academic work. You must not plagiarize, cheat, or collude in connection with exams or assignments and must acknowledge fully all sources and all assistance received in work submitted to a faculty member for evaluation. Please refer to university policy for additional information: <http://www.csus.edu/umannual/student/UMA00150.htm>. A tutorial on how not to plagiarize is available at <http://library.csus.edu/content2.asp?pageID=353>.

Goals: This course represents an opportunity for everyone to acquire and / or reinforce a common area of knowledge that is critically important to the science of psychology; that is, the strategies we have available to us for gaining knowledge and testing theory, including their strengths and limitations. It is my hope that you will gain skills and confidence in reading and interpreting the scientific literature that is the foundation for applied work in psychology. In addition, I hope that you will be able to use this course as a workshop in which you begin to prepare for how to approach your own research, including your thesis or project. You will also develop your public speaking, group facilitation, and leadership skills by conducting at least one presentation and discussion on assigned topics during the semester. Finally, you will be asked to read about and consider ethical issues as they relate to research. Ethics are an important aspect of your pre-professional and professional identity; a familiarity with ethical issues and awareness of when to seek consultation with regard to ethical “gray areas” is critical to your training.

Presentations: The course will be a combination of lecture, discussion, and workshop formats. You and your fellow students will be responsible for conducting the majority of the lectures, based upon the assigned readings, plus additional source material you locate.

- You will be required to bring in additional sources (including at least one that is cited in your assigned readings plus several additional resources, for a total of **at least 5** resources being incorporated in your outline and presentation).
- You will also lead a discussion of the reading (you should NOT recap the chapter and readings in their entirety). At least ½ of your time should be spent in an interactive format (e.g., class discussion or activities). If your presentation is entirely didactic, you will be marked down for this. This means it is up to you as a presenter to generate enthusiasm. By the way, each of you will benefit if the class as a community adopts an engaged, participatory approach.
- Interactive formats may include leading discussion on topics you have prepared; developing a game format (e.g., “Jeopardy”-style games); providing some kind of structured task; discussing an article or issue; engaging the class in designing or evaluating research; etc.
- A detailed outline of the presentation will be due to me two weeks prior to your presentation; late outlines may result in a lowered grade.
- You are expected to meet with me in order to discuss your plans so that I can provide feedback **prior** to completing your outline.
- You will be graded on content, organization, and presentation, interactive activities, questions posed to the class, and your responses to questions posed to you. In addition, you will be evaluated on materials such as overheads, examples, exercises, handouts and any other supporting materials you use.

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Projects—Overview:

- Project 1 Each class member will develop an annotated bibliography on subtopic assigned to your group.
- Project 2 Each class member will identify an appropriate follow-up question from one (or a series) of your articles. Write up a rationale for the question.
- Project 3 Each group will operationalize a research question (usually the same as in Project 2, but not necessarily) in the form of three proposed methodologies for a study. Identify strengths and limitations of the methodologies chosen (scope, internal and external validity, etc.).
- Scale Project. Each group will identify a measure to investigate and critique. Obtain relevant literature or manuals. Seek information from resource books on measures relevant to the one you chose. How was it developed? What are its strengths and weaknesses? How has it been used in the literature? Critique. What would you do to improve this scale and/or adapt it to your area of focus?

All assignments may be changed at the instructor’s discretion and within reason given time available, proportion of project completed, etc.

Evaluation:

Presentation	30%
Project #1	15%
Project #2	15%
Project #3	20%
Scale Project	10%
Participation	10%
100%	

The grading scale is as follows:

Letter grade	Percent
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
F	<60%

Projects—Detailed Instructions:

All reference lists should be in current APA style for full credit. Please pay attention to the assignments as described below; if something is listed as a topic to address in your write-up, be sure to include it or points will be deducted.

Project 1: Develop an annotated bibliography on subtopic assigned to your group. Each individual will complete this task. **12-15 articles.** Can include general articles on **stress** (recommended) as well as articles more specific to your subtopic (required). Ideally would include a range of article types: theoretical, review, correlational, experimental, meta-analysis, measure development, etc. Should include some chapters that introduce you to the construct and overview the research being conducted in relation to the construct. Should include several journal articles. Each bibliography within the class should be non-overlapping; requests for exceptions (more than one person to write up the same article) can be made but will not *necessarily* be honored. In the case of two people requesting to write up the same article, the requests will be evaluated based on relevance to group subtopic, timing of request, and/or other factors, but may be decided randomly, at the instructor's discretion. You will be able to download an Excel table format from WebCT and use it to submit your article selections for instructor tracking. Summaries included in annotated bibliographies should generally be 2-4 per page, depending on the type and complexity of the article reviewed; they should NOT consist of a copy of the abstract provided by the authors.

Deadlines and Points:

Proposed list due: **2/20 at 7 PM**

Completed bibliography due (articles to be made available to Dr. Cameron if requested): **3/5 at 4 PM via WebCT**

Percentage of final grade for completed bibliography (IND): **15**

Project 2: Identify an appropriate follow-up question or hypothesis(es) from one (or a series) of your articles. Each individual will generate a research question and bring it in as a **1-2-page narrative written proposal (plus outline and references, for a total of approximately 3 pages)** consisting of the question and a brief rationale in paragraph form, citing relevant literature, along with an outline and citations that would be the starting point for an introduction. Is the question theoretical or applied or both? Identify what your question includes and what it doesn't include (you need to keep it simple and focused). The group will consider each proposal and decide on one research question for project 3, in consultation with Dr. Cameron. The group will then write up a well-organized and logical introduction, providing the background and rationale for the chosen question with appropriate citations (**approximately 6 to 9 pages, including references**).

Deadlines and Points:

One-page proposals due (to instructor, group members): **3/12 at 4 PM**

Percentage of final grade for one-page proposals (IND): **5**

Group decision on research question due: **3/12 during class**

Introduction due: **3/26 at 4 PM**

Percentage of final grade for introduction (GRP): **10**

Project 3: Imagine that you are requesting support for an ongoing research program to investigate the question you decided on in Project 2. This research program needs to utilize a range of methodologies to address the question. Operationalize the research question/hypothesis(es) decided on by the group in Project 2 in the form of three proposed methodologies for answering/addressing the question (or an equivalent number of methodologies to the number of members in the group). At least one should be correlational and one should be experimental; these should be designed to maximize the benefits of each approach. It is appropriate to model methodologies on articles included in your literature review, with modifications to make them appropriate for your question/hypothesis(es) (but DO give credit

when your methodology is modeled after another study). Together, these might represent different stages of a program of research or different aspects of the same basic question. Each member of the group should agree on all of the methodologies, with each individual taking primary responsibility for one methodology for a study and contribute substantial feedback, editing, and conceptualization assistance for the other two. Write up each proposed methodology in the form of a specific, operationalized version of the research question and its rationale plus hypothesis(es) (**up to 1 page**), plus a proposed Method section written in the future tense (including proposed participants, procedures, and measures), and a section identifying strengths and limitations of the methodology chosen (scope, internal and external validity, etc.; refer to the general topics covered in the course to develop a checklist of areas to critique). Be sure to address areas of ethical concern or sensitivity as well. Group members should work together to review, edit, and improve each others' methodology write-ups as groups will receive one grade for this project. Each methodology should be approximately **6 to 8 pages, for a total of approximately 21 to 27 pages for a 3-person group, including 1 combined reference list.**

Deadlines and Points:

Decision on three methodologies, who is point person for each, due: **4/23 during class**

Synopsis of proposed methodologies and relationship to research question for feedback from group members, other classmates, and/or Dr. Cameron (1-2 pages per methodology), due: **4/30 during class**

Write-ups of methodologies due: **5/19 at 4 PM (Finals week)**

You may be required to hand in edited drafts to show group participation in refining the write-up. Please note: problems in group cooperation or functioning should be brought to Dr. Cameron's attention as soon as possible, preferably by all members of a group.

Percentage of final grade for methodologies (GRP): **20**

Scale Project: Each group member should identify one or more scales (or other measurement approaches) measuring **stress** or a related construct relevant to the group subtopic. Obtain Dr. Cameron's approval for the chosen measure. The group will work together to identify one measure to investigate and critique. Obtain relevant literature or manuals. Seek information from resource books on measures relevant to the one you chose. Write up should include several topics, as follows. Describe the measure, including its purpose, structure, typical questions/stimulus materials, etc. How was it developed (basis in theory? Strategy for validation? Etc.)? What are its strengths and weaknesses? How has it been used in the literature? Critique; don't forget citations for points you make! What would you do to improve this scale and/or adapt it to your area of focus (or what are its limitations)? (**8 to 10 pages, including references**)

Deadlines and Points:

Proposed scales due: **2/20 at 7 PM**

Decision on scale due: **2/27, during class**

Write-up due: **4/16 at 4 PM**

Percentage of final grade for write-up (GRP): **10**

Schedule: The following is a **tentative** schedule; changes can be made at the instructor's discretion.

Week of

1: W 01/30

Introduction to course/Overview

2: W 02/06

1: Behavioral Science: Theory, Research, and Application

2: Research Strategies: An Overview

3: W 02/13

4: Formulating a Research Question

13: Interpreting Research Results

4: W 02/20

Library Day/ Group Meetings/ Planning

ASSIGNMENT(S) DUE

**Project 1, Proposed bibliography list, due 7 PM.
Scale Project, Proposed scales, due 7 PM.**

5: W 02/27

3: The Ethical Treatment of Research Participants

ASSIGNMENT(S) DUE

Scale Project, Group decision on scale, due during class.

Student Presentations Begin:

6: W 03/05

5: Developing a Measurement Strategy
11: Survey Research

ASSIGNMENT(S) DUE

Project 1, Completed bibliography, due 4 PM.

7: W 03/12

Diversity and Culture: Reading TBA

ASSIGNMENT(S) DUE

**Project 2, One-page proposals, due 4 PM.
Project 2, Group decision on research question, due during class.**

8: W 03/19

6: The Internal Validity of Research
7: The Experimental Research Strategy

9: W 03/26

8: The Correlational (Passive) Research Strategy

ASSIGNMENT(S) DUE

Project 2, Introduction, due 4 PM.

SB: W 04/02

Spring Recess—Enjoy your break!

10: W 04/09

10: Research in Natural Settings
14: The External Validity of Research

11: W 04/16

12: Data Collection
17: Writing Research Reports

ASSIGNMENT(S) DUE

Scale Project, Write-ups, due 4 PM.

12: W 04/23

16: Integrative Literature Reviewing

ASSIGNMENT(S) DUE

Project 3, Decision on three methodologies, who is point person for each, during class.

13: W 04/30

9: The Single-Case Research Strategy

ASSIGNMENT(S) DUE

Project 3, Synopsis of three methodologies, during class.

14: W 05/07

15: Evaluation Research

18: The Professional and Social Responsibilities of Scientists

15: W 05/14

Catch-Up Day, Project Meetings, TBD

Project 3, Methodologies Write-up, due Monday 5/19 4 PM (finals week)

Have a great summer!