# EXPERIMENTAL METHODS IN PSYCHOLOGY Psychology 212 Fall 2004

#### Instructor:

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Clough 129

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Office hours: Mon 9:00-11:00pm, Wed 10:00-11:00pm

# Meeting Time and Place

Mon & Wed 1:00-2:15 pm Clough 123 Lab: Fri 1:00-4:00pm Clough 123

#### Required Texts

Cozby, P. C. (2001). Methods in behavioral research. California: Mayfield Publishing Company.

APA Publication Manual (fifth edition)

#### Purpose

This course will help you learn the basic principles of experimental methodologies used in psychology and apply the methodologies in a real setting. You will be involved in hands-on research projects. You will learn how to conduct research experiments (run subjects, collect data and analyze results, etc.). This course will help develop your critical and scientific thinking.

#### Objectives

- 1) You will learn how to apply course material to improve thinking and problem solving (e.g., presentations, experimentation).
- 2) You will acquire skills in working with others as member of a team
- 3) You will develop skill in expressing yourself orally and in writing

#### Exam

One exam will be given. The exam will consist of multiple-choice questions and short-answer and long-essay questions. A typical test might have 30 multiple choice questions and 3-4 short answers and 1 essay question. The exam will be 1-hour long.

#### Team Work

You will work with your partners on your research project. Thus, it is very important to make contributions to every stage of a research cycle (from formulating hypotheses to presenting at a conference). Throughout the semester, I will ask your partners to evaluate your work. If problems arise, inform me early and I will try to change the situation.

#### IRB Proposal

You and your partners will write an ethic's proposal on your project. At Rhodes, every research project must be approved by a college-wide committee (IRB).

## Annotated Bibliography

You are responsible for finding 9 articles relevant to your topic, and summarize and critique the 9 studies (1-2 pages per article). You need to include the abstracts of the articles (obtained from PsycInfo) in your summaries. All of the studies should be empirical.

### Article presentations

There will be six presentations. Each presentation should take approximately 10-15 minutes. You will make presentations on any of the following chapters and the studies relevant to your research topic.

Chapter 3 ethical research
Chapter 5 measurement concepts
Chapter 6 observing behavior
Chapter 7 survey research
Chapter 8-9 experiments
Searching for conferences

When you present on a book chapter, You will find an article relevant to the theme of a chapter that is listed above, summarize and critique the findings of the study (e.g., strengths and weaknesses). When you present, you need to discuss at least four concepts from your assigned book chapter and describe how they are applied to your study (e.g., relate them to real life situations).

Your article should come from a reliable source (i.e., a published article in academic journal). You need to submit two copies of your article. I will leave one copy in a reading room (Clough 100) so that everyone can read it beforehand. It will be a plus if you provide a handout for class.

#### **Group Presentations**

You will be responsible for preparing two group presentations on your research project (about 40 min. each).

You will be required to give background information on your topic, discuss relevant research, and generate discussion. 10 points will be allocated to presentation materials (e.g., overhead or PowerPoint slides) and 20 points to execution of the presentation. You are required to turn in a copy of your PowerPoint (or overhead) slides to me when you give a presentation.

#### Poster Presentation

You and your partners will complete a poster presentation of your research project at a poster conference. Details about the conference will be discussed later in the semester. Each group should be prepared to give a brief talk to attendees (5-7 min.) This poster

presentation will help you think more deeply about your study and the meaning of data -- as you prepare your arguments to others. Your presentation will be evaluated by me and other professors.

#### Research Paper

You will write a research paper on your study. You are responsible for doing thorough background research on your topic and writing up a report in APA format. The paper should include abstract, introduction, method, results and discussion. The paper should be about 14-16 pages in length (excluding title, abstract, references, tables/figures, and appendices pages).

# Grading

Test	40 points
Activities	28 points
Conference paper*	10 points
Research paper*	80 points
IRB proposal	30 points
Group Pres 1	30 points
Group Pres 2	30 points
Individual pres.	42 points (7 points each)
Team work &	
class participation	50 points
Bibliography*	50 points
Poster	30 points

#### Note: \* Individual assignments

You can earn a total of 420 points and the percentage of the total points obtained will be used to determine your grade according to the following:

95% or above = A 80-94% = B 70-79% = C 60-69% = D Below 59% = F

#### **Excuses**

The exam should be taken on the day assigned. I will only allow make-up exams under highly unusual circumstances (e.g., sickness requiring doctor's visit). 10 points will be deducted each day for late paper.

# Class Participation

This will regard from showing up for class, civility in the classroom, and participation in discussion to collaboration with your partners in your project.

# Plagiarism

Plagiarism is presenting someone else's thoughts, data, ideas or language as your own. You should not use other's work without giving the author credit. We treat plagiarism as a serious offense.

# Honor Code

You must abide by the Honor Code outlined by your student handbook. It is a violation to consult old tests, papers, or handouts before doing assignments. It is also a violation to turn in a paper written for another course. The most essential consequences of this code for this course are: 1) all papers must represent your original thoughts and 2) all papers must represent original work unique to this course.

# Class Schedule of Topics (TENTATIVE)

Week beginning	Topic & reading	Activity
8/22	Scientific understanding of research (ch.1)	
8/29	Where to start (ch. 2)	Choose a research topic form a group (Mon) PsycInfo tutorial(Wed)
9/5	Writing research reports & IRB Ethical research (ch. 3)	
9/12	Studying behavior (ch. 4) Research designs (ch. 10)	Group presentation #1 (30 min.) – Wed
9/19	Measurement concept (ch. 5)	Submit: IRB proposal (Wed)
9/26	Observing behavior (ch.6)	
10/3	Survey (ch. 7)	Test covering ch. 1 ~ 10 (Wed)
10/10	Experimental designs (ch. 8-10)	Submit: bibliography (Wed)
10/17	Fall Recess	
10/24	Understanding research results	
10/31	Data collection	
11/7	Data collection and data analysis	
11/14	Discuss results with the instructor	SPSS Outputs Due (Wed)
11/21	Understanding research results contd. <b>Thanksgiving!</b>	Rough Draft Due (optional)
11/28	Group Presentation #2 (12/1)	Group Pres. #2 Submit: Poster due (Wed)
12/5	Poster Conference (12/6) 12/8 (last day of class)	At 1-5 pm (in clough basement)
12/14	Finals week: Good luck!	Submit: Research Paper (12/13)