Psychology 200: Research Methods and Statistics
Term I, 2004 - 2005

Professor: Chris Wetzel	Class time:	Office hrs:
Office: 115 Clough	MWF 9:00 – 9:50	MWF 8:00-9:00; 2:00-3:00 TuTH 8:30-9:30

Course Objectives

First, I will expose you to the basic research techniques used in psychology. You will learn the fundamental principles of research design, how psychologists gain knowledge. You will also develop skills and competencies needed to begin a research project. Second, I hope to give you enough practical experience so that you will be ready for upper-level laboratory courses and so that you can make an informed decision about possibly pursuing a research career after you graduate. A final goal is to change your thinking so that you can: 1) critically analyze aspects of your personal life, 2) become an informed citizen who thinks scientifically about social issues, and 3) become an intelligent consumer of research findings presented in the media. In sum, you should finish this course with an appreciation of J.S. Mill's statement, "The logic of science is also that of business and life."

In terms of the 12 IDEA objectives used to evaluate Rhodes courses, the following course objectives are very important: Learning fundamental principles, generalizations, and theories; and learning to analyze and critically evaluate ideas, arguments, and points of view. The following are important: developing specific skills, competencies, and points of view needed by professionals in the field; gaining factual knowledge (terminology, classifications, methods, trends); and learning how to find and use resources for answering questions or solving problems. The following are not formally assessed: acquiring team member skills, developing creativity; appreciating for the arts; developing skills in self-expression; developing personal values; learning to apply course material; and asking your own questions and seeking answers.

Assessment and Course Requirements

Your text, Pelham & Blanton's ***Conducting Research in Psychology, (2nd Ed.), 2003***, will be covered at a very rapid pace. There will be 3 tests on this text, plus the final, and they count 35% of your grade. They are a combination of multiple choice, short answer, and even some essays.

You will have other assignments such as presenting research findings orally in class, criticizing articles, proposing alternative research studies for flawed experiments, etc. Handouts about these assignments, plus information about the course can be found on the academic volume in the "200" folder within the "wetzel" folder. In order to do well in this course, you must be computer literate and familiar with using the Mac/PC Lab. (Throughout the semester the Computer Center offers free courses on how to use a computer if your skills are weak.) There will be 10 writing or homework assignments, the top 9 of which will count 20% of your grade. Many of your homework assignments will mimic the research process in the area of dissonance theory. For these assignments, you will work with a partner, who will critique your "personal draft" (you will do the same to his/her draft). For grading purposes, you will turn in a revised version of the assignment.

You will perform 2 laboratory assignments where you will collect data with a "canned" computer experiment, or you will access a data base already generated by the experimenters. You then analyze data, and finally write up the findings in APA style. These assignments will count a total of 25 %.

You will make a research proposal where you review the experimental literature and propose an experiment (which you may conduct in psychology 211/212). This paper will follow APA style for the introduction and the method sections. You will then present hypothetical results for the results and discussion sections. This paper will count 20% of your grade.

It is an honor code violation to consult old tests, papers, or hand-outs before doing assignments. It is also a violation to turn in a paper written for another course.

SCHEDULE

#	Day	Date	Reading	Topic	Assignment due or Class activity
1	W	8/25	-	Coming up with a good research Q	
2	F	8/27	1, D-theory	Forming hypotheses; Research Cube	Make question, D theory & suffering
3	M	8/30	255-268	Doing a PsychInfo Search	Prepare keywords for search (own topic)
4	W	9/1	D1	*The* versus *a* contributing cause	Complete psychinfo search on own topic
5	F	9/3	2	Rival hypotheses + alt. explanations	Prepare D1 abstract
Labor day					
6	W	9/8	3	Reliability	Give rival hypotheses for D1, read handouts
7	F	9/10	3	Validity	Load AW plugin for your PC
8	M	9/13		External validity: process vs. outcomes	track down lit search articles
9	W	9/15	review		**Exam#1**: 1-3, 255-268
10	F	9/17	4	Rival Hypotheses : the top 20	Do Self-reference Experiment (with instructions)
11	M	9/20	5	Rivals for D1	Give rival hypotheses for D1
12	W	9/22	6	IV's, DV's, and their variants	First Experiment Paper due: Self-reference
13	F	9/24	7	Quasi Experiments	
14	M	9/27	article parts		read literature on research proposal
15	W	9/29			read some more articles!
16	F	10/1	D2-intro		Write D-2 method,
17	M	10/4	review		**Exam #2**: 4 -7
18	W	10/6	D2-results;8	Within versus between designs	Write D-2 discussion
19	F	10/8	8; handout	main effects, simple effects, interactions	read interactions handout
20	M	10/11	D2-discuss		
21	W	10/13	9	Testing theories with correlations	meet with me about research proposal
22	F	10/15		Debriefing: funnel & process types	REread interactions handout
Fall Break					
23	W	10/20	10	Stats	
24	F	10/22		Meta-Analysis	research proposal: first draft of method
25	M	10/25		Accounting for Variance	
26	W	10/27	D3-exp#1		D3 oral presentation #1
27	F	10/29		Design contest 1	revise research proposal
28	M	11/1	D3-exp#2		D3 oral presentation #2
29	W	11/3	11 (skim)	Dummy D pseudo experiment	quiz on interactions; lit review of own research question
30	F	11/5	12	More Design contest 1	Dummy D analysis and write-up
31	M	11/8	13, handout	Illogic of the null hypothesis	Read illogic handout
32	W	11/10		Bias in favor of the research hypothesis	
33	F	11/12	review		**Exam 3**: 8 -13
34	M	11/15		D theory wars exercise	turn in research proposal introduction
35	W	11/17			quiz on interactions
36	F	11/19		Still more Design contest 1	
37	M	11/22		Design contest 2	turn in research proposal method
Thanksgiving					
38	M	11/29	handout	More Design	read Faces Recognition article
39	W	12/1		Faces Recognition Experiment	
40	F	12/3		More Design	Faces Recognition Experiment write-up
41	M	12/6		More Design	
42	W	12/8		More Design	turn in hypothesized results + discussion
Wednesday Dec 15th, 8:30 am.					

* This syllabus schedule is only a rough guideline. There will be many changes, and they will be announced at least 24 hours before the day on which an assignment is due.