Psychology 200: Research Methods and Statistics
Term I, 2006 - 2007

Professor: Chris Wetzel	Class time:	Office hrs:
Office: 115 Clough	MWF 11:00 - 11:50; 2:00 – 2:50	MWF 9 -11 TuTH 9 -11; 2:30 – 3:30

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 texts, Pelham & Blanton's ***Conducting Research in Psychology,*** *(3rd Ed.), 2006*, and Rosnow and Rosnow's **Writing Papers in Psychology** (7th Ed), 2006, will be covered at a very rapid pace. There will be 3 tests on this text, plus the final, and they count 40% of your grade. The exams 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 are on WEBCT. There will be 10 or 11 writing or homework assignments, the top 9 or 10 of which will count 40% of your grade. Many of your homework assignments will mimic the research process in the area of dissonance theory.

You will perform an experiment where you will collect data with a "canned" computer experiment, or you will access a data base already generated by the experimenters. I will analyze data and present the results to you; you will write up the findings as an APA style paper. You will also make a 5 minute oral presentation on a research article. These two assignments are worth 20% of your grade. If your performance is unsatisfactory on these assignments, you will have an option to write a second paper and/or a second oral presentation, which will then be averaged with your first grades.

The course material is not easy. You are expected to come to class prepared; that means you are alert and actively engaged, you have done the reading assigned for that day, AND you brought to class the day's lecture notes downloaded from WEBCT. Because there will be many in-class exercises that count as homework, class attendance is essential. Work turned in late (after 5 pm the day it is due) receives a letter step penalty (eg. an A goes to an A-) per day it is late.

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	8/23	-	Course Overview	
2	F	8/25	D-theory	*The* versus *a* contributing cause Rival hypotheses + alt. explanations	Write D theory & suffering explanation read course info (philosophy, FAQs etc.)
3	M	8/28	1, D1	Internal & External validity	Give rival hypotheses for D1; read mortal sins
4	W	8/30	245-258	Testing rivals for D1	Read & reread read main effects & interactions
5	F	9/1	2	main, simple, & interaction effects	study interactions, practice interactions test
Labor day					
6	W	9/6	3	More on interactions	
7	F	9/8	4	Reliability	
8	M	9/11	4	Validity	take first interactions quiz
9	W	9/13		More validity	
10	F	9/15	review	catch up	
11	M	9/18	5		**Exam#1**: 1-3
12	W	9/20	6	Go over exam	take second interaction test
13	F	9/22	7	Doing a PsychInfo Search	Read generating research Q's; read target article from Psych Info search and report Research Q, IVs,DVs, and what you would do differently.
14	M	9/25	8,appendix4	IV's, DV's, and their variants	article parts, Write D1 abstract
15	W	9/27	R&R book		
16	F	9/29	D2-intro	Quasi Experiments	Write D-2 method
17	M	10/2	D2-results	Choosing Stats	Write D-2 discussion
18	W	10/4	D2-discuss	Dummy D pseudo experiment	Read annotated discussion; stats tree handout
19	F	10/6		Rival Hypotheses : the top 20	
20	M	10/9			Dummy D analysis and write-up
21	W	10/11		Meta-Analysis; archival problems	take third interaction test
22	F	10/13	11 (skim)	Debriefing: funnel & process types	
Fall Break					
23	W	1018	12; 287-291	Within versus between designs	read meta-analysis
24	F	10/20		review	
25	M	10/23	9	Go over exam	**Exam #2**: 4 -7
26	W	10/25	9	Type 1/2 error exercise	read % of variance;
27	F	10/27	10	Accounting for Variance	Read illogic handout; write self-ref discussion
28	M	10/30		Illogic of the null hypothesis	testing theories with correlations
29	W	11/1	D3-exp#1	Design contest	
30	F	11/3			D3 oral presentation #1
31	M	11/6			Load AW plugin for your PC (with instructions)
32	W	11/8		Advantages of Factorial Experiments	Do Faces Recognition Exp; view presentation
33	F	11/10		Bias in favor of the research hypothesis	read Faces Recognition articles
34	M	11/13		Present Faces Recog results	Write Faces intro and method
35	W	11/15		Testing theories with correlations	Faces Recognition Experiment write-up
36	F	11/17	review		**Exam 3**: 8 -13
37	M	11/20	D3-exp#2?	Go over exam	Do self-reference experiment if needed
Thanksgiving Break					
38	M	11/27		D theory wars exercise	Make-up for oral presentation due?
39	W	11/29		qualitative research: coding	
40	F	12/1		More Design contest	
41	M	12/4			Make-up for self-reference paper due?
42	W	12/6		catch up	
Complete online final by noon Dec 9th Saturday					

* 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.