Psychology 200: Research Methods and Statistics
Term I, 2007 - 2008

Professor: Chris Wetzel	Class time:	Office hrs:
Office: 115 Clough	MWF 11:00 - 10:50 & 3:00 – 3:50	MWF 9 – 9:30 MF 1:30 -2:30 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 an experiment. 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 important: Learning fundamental principles, generalizations, and theories; developing specific skills, competencies, and points of view needed by professionals in the field; learning to analyze and critically evaluate ideas, arguments, and points of view; and gaining factual knowledge (terminology, classifications, methods, trends). 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 - 12 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, with the 2nd paper/talk counting twice as much as first one.

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	8/22	-	Course Overview	
2	F	8/24	D-theory	*The* versus *a* contributing cause Rival hypotheses + alt. explanations	
3	M	8/27	1, D1	Internal & External validity	Write D theory & suffering explanation read course info (philosophy, FAQs etc.)
4	W	8/29	245-258	Testing rivals for D1	Give rival hypotheses for D1; read mortal sins
5	F	8/31	2	main, simple, & interaction effects	Read & reread read main effects & interactions
				Labor day	
6	W	9/05	3	More on interactions	study interactions, practice interactions test
7	F	9/07	4		
8	M	9/10	4	Reliability	take first interactions quiz in class
9	W	9/12		validity	
10	F	9/14	review	catch up	
11	M	9/17	5		**Exam#1**: 1-3
12	W	9/19	6		
13	F	9/21	7		take second interaction test
14	M	9/24	R&R book	Doing a PsychInfo Search	
15	W	9/26	appendix4	Go over exam, interactions	Read generating research Q's; read target article from Psych Info search and report Research Q, IVs,DVs, and what you would do differently.
16	F	9/28	8	IV's, DV's, and their variants	
17	M	10/01	D2-intro		article parts, Write D1 abstract
18	W	10/03	D2-results	Quasi Experiments	Write D-2 method
19	F	10/05			Write D-2 discussion
20	M	10/08	D2-discuss 11: 295 – 310	Rival Hypotheses : the top 20	Read annotated discussion
21	W	10/10	9: 243 - 247	Choosing Stats	stats tree handout
22	F	10/12		Dummy D pseudo experiment	
				Fall Break	
23	W	10/17	11 (skim)		take third interaction test
24	F	10/19	9: 258-267	Within versus between designs	Dummy D analysis and write-up
25	M	10/22			
26	W	10/24		review	**Exam #2**: 4 -7
27	F	10/26		Go over exam	read meta-analysis
28	M	10/29	10	Meta analysis	read % of variance;
29	W	10/31		Accounting for Variance	Read illogic handout
30	F	11/02	D3-exp#1	Illogic of the null hypothesis	D3 oral presentation #1
31	M	11/05	11: 311-317	Testing theories with correlations	Read cor hyp test (testing theories with correlations)
32	W	11/07		Type 1/2 error exercise	Load AW plugin for your PC (with instructions)
33	F	11/09		Advantages of Factorial Experiments	Do Faces Recognition Exp
34	M	11/12	Appendix 3	Bias in favor of the research hypothesis	read Faces Recognition articles
35	W	11/14		Present Faces Recog results	Write Faces intro and method
36	F	11/16		Design contest	Faces Recognition Experiment write-up
37	M	11/19	review		**Exam 3**: 8 -11
				Thanksgiving Break	
38	M	11/26	D3-exp#2?	Go over exam	
39	W	11/28		D theory wars exercise	Make-up for oral presentation due?
40	F	11/30		qualitative research: coding	Do self-reference experiment if needed
41	M	12/03		More Design contest	
42	W	12/05		Still more Design contest	Make-up for self-reference paper due? URCAS
Complete online final by noon Wednesday Dec 12th					

* 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.