

Psychology 200: Research Methods and Statistics
Professor Bette Ackerman
Fall, 1998

Office: 117 Clough
Office Hours: MWF 2:30 - 3:30, Tu 1:00 - 2:30

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Course Description

The goal of this class is to help you obtain the tools necessary to conduct and evaluate quantitative social science, especially psychological, research. We will start at the very beginning by discussing what is science, what makes social science different from the "natural sciences we are more familiar with, the problems inherent in applying the scientific method to the subject matter of the social sciences, the need for statistics and probability, etc. We will then move into a more focused discussion of the specific issues and problems that arise when conducting psychological research. We will use "canned" experiments (experiments already designed and in this case, computerized) by which to get first hand experience with these problems and procedures. We will also discuss how one goes about selecting a research question and methodology.

Evaluation

Research Proposal

By the end of the course, you will display your newly acquired skills at the end of the semester by submitting a proposal for an original research project in an area of your interest. Ideally, this proposal will actually turn into the research project that you will conduct in you Psychology 212 course. This means that you will have to be realistic in selecting a topic and procedure which can be reasonably conducted at Rhodes. The proposal will be worth 20% of your final grade.

Exams

There will be three in-class exams during the course. These exams will be a combination of multiple choice questions, short answers, essays, and problems. Each exam will account for 20% of your final grade. There will be no final, or cumulative exam.

Homework

Frequent small assignments will be made -- usually to take part in one of the computerized experiments, or to evaluate one using the criteria discussed in class. Homework will be graded, and all together with be worth 15% of your final grade.

Participation will make up the final 5% of your grade.

Use of Computer for Experiments

The computer experiments you will used to collect data will reside on the Mac in Clough 108C. This machine is the property of the Psychology Department, and is only to be used for designated class purposes. You are not to alter the settings, change software configuration, add or delete software, or to open any files or programs other than those specified in this course.

Attendance Policy

This is a small class, with a lot of discussion and interaction. Unexcused absences will be counted, and will result in a lowering of your final grade.

	Day	Date	Reading
1	Thursday	Aug. 27	Intuitive Understanding of Science
2	Tuesday	Sept. 1	Stan. 1 Science & Empiricism 2 Falsifiability
3	Thursday	Sept. 3	Stan. 3 Operationalism 4 Testimonials & Case Studies
4	Tuesday	Sept. 8	Stan. 5 Correlation & Causation 6 Control & Manipulation
5	Thursday	Sept. 10	Stan. 7 Artificiality 8 Converging Evidence
6	Tuesday	Sept. 15	Stan. 9 Multiple Causation 10 Probabilistic Reasoning
7	Thursday	Sept. 17	Stan. 11 Chance 12 Image etc.
8	Tuesday	Sept. 22	Exam 1
9	Thursday	Sept. 24	Sal. 1 The Role of Research
0	Tuesday	Sept. 29	Sal. 2 The Research Process
11	Thursday	Oct. 1	Hypothesis Testing
12	Tuesday	Oct. 6	Sal. 3 Selecting a Problem & Reviewing the Research
13	Thursday	Oct. 8	Sal. 4 Sampling and Generalizability
14	Tuesday	Oct. 13	Sal. 5 Measuring Behavior
15	Thursday	Oct. 15	Sal. 6 Methods of Measuring Behavior
	Fall Break		
16	Thursday	Oct. 22	Sal. 7 Data Collection and Descriptive Statistics
17	Tuesday	Oct. 27	
18	Thursday	Oct. 29	Exam 2
19	Tuesday	Nov. 3	Sal. 8 Inferential Statistics
20	Thursday	Nov. 5	
21	Tuesday	Nov. 10	
22	Thursday	Nov. 12	Sal. 9 Nonexperimental Research Methods
23	Tuesday	Nov. 17	Sal 10 Experimental Research
24	Thursday	Nov. 19	Sal 11 Quasi-Experimental Research
25	Tuesday	Nov. 24	Exam 3
	Thanksgiving		
26	Tuesday	Dec. 1	Sal. 12 Writing a Research Proposal
27	Thursday	Dec. 3	Sal. 13 Writing a Research Manuscript
28	Tuesday	Dec. 8	
	Saturday	Dec. 12	