Foundational Issues in Psychology
Psychology 150
Fall Semester 1998

Dr. Bette Ackerman
117 Clough Hall, Ext. 3985
Office Hours: MWF 2:00 - 3:30, Tues. 1:00 - 2:30, or by appointment.

I. Course Objectives

Psychology 150 is designed for students who wish to prepare for further study in the field of psychology or in related fields. It is a prerequisite for all advanced courses in the department of psychology. There are two interrelated course objectives for Psychology 150:

A. Students will become familiar with methods of investigation in psychology and will exercise critical thinking skills in evaluating psychological research. This will entail:
   1. familiarity with the ethical and scientific principles that guide psychological research.
   2. the ability to formulate empirical questions and operational definitions of psychological variables.

B. Students will become familiar with the foundational issues in the field of psychology and with the five major approaches to the study of these issues: biological, learning theory, cognitive, socio-cultural, and psychodynamic. Familiarity with foundational knowledge will entail:
   1. the ability to recognize and discuss recurring themes and underlying principles that emerge in various areas of the discipline.
   2. an understanding of the underlying assumptions and principles that guide the five major schools of thought in psychology, and an ability to compare and to evaluate thinking from these different perspectives.

II. Course Requirements

A. Reading Assignments

1. The following two textbooks are required, and must be read by class time on the day they are listed in the schedule below. The first text describes the five major approaches to the field of psychology and presents major themes. The second book is a collection of edited versions of classic psychological experiments, which is included to d prepare the student to read and evaluate psychological studies.

   Tavris, C. & Wade, C. (1997). *Psychology in perspective, 2nd Ed.* Addison-Wesley. (TW)

   Hock, R.R. (1995). *Forty studies that changed psychology, 2nd Ed*. Prentice Hall. (H)

2. The following book is required for all psychology majors and it is recommended that students purchase a copy in their first course. It includes helpful information about using the library and about writing paper in the professional style required in all psychology courses.
   Rosnow, R. L., & Rosnow, M. (1992). *Writing Papers in Psychology, 2nd Edition*. Belmont, Ca.: Wadsworth.

B. Examinations

1. In-class exams. Five objective, multiple choice and short-answer tests will be given during the term. These will cover material from assigned readings, class lectures, and discussions. Each test will count 10% of the final course grade. Students should notify the instructor before scheduled exam date if exam is to be missed, otherwise students will receive a 0 for that exam grade.

2. Final Examination. A comprehensive final examination will cover all course work. The exam will be similar in format to the in-class examination and it will count 15% of the final course grade.

C. Student Investigations

Students will complete three Student Investigations (SI) and will turn in reports of their work on the dates listed in the schedule (worth 30% of the final). Student Investigation assignments involve collecting data and must be done in accordance with the *Ethical Guidelines for Research with Human Subjects* published by the American Psychological Association and kept on reserve in the Atkinson Reading Room (Clough 111a). All projects must be typed and prepared in the format described below. SIs turned in later than 4:30 p.m. of the day due will suffer a full letter grade penalty. Those not prepared according to these specifications will be returned and must be redone; they will suffer the late penalty. No late work will be accepted after the last class day.

Use the following form to report Student Investigations. Remember that you are reporting on work which you have completed, so the report should be written in past-tense.

1. Description and Explanation of Research Question.
   Describe your research question, the hypothesis you are testing (note: there isn't a hypothesis for SI 1), and the purpose of the project. Report previous research or background theory that is relevant to the study. At the very least you should provide sufficient background to allow the reader to understand why the work was carried out.
2. Description of Method.
   a. Subjects: Detail the number and relevant characteristics of your subjects (e.g. age, education, etc.). Do not identify research participants by name or by other traits that uniquely identify them.
   b. Procedure: Carefully and clearly describe your research procedure.
3. Results.
   Give a clear and orderly description of your results. Present numerical data in tables and/or graphs. Always attach all raw data to the end of the report.
4. Discussion.
   Explain your research results in light of what was expected, based on previous research and theory. If your results do not support your expectations or corroborate previous research, discuss why you think this happened. You may be able to come up with reasons why your data lead to different conclusions than you initially expected. Consider the flaws and/or limitations in the procedure you used. How might the procedures used in this investigation be changed to address some of the criticisms you make?

D. Experiment Participation.

Students are encouraged to participate in ongoing research in the department by "volunteering" for **three hours** (not three experiments!) to be subjects in experiments conducted by students in advanced psychology classes. All such research will be approved first by the Rhodes' Human Subjects Review Committee, and participants will be given an opportunity to learn about the findings of the research at the end of the project. We believe that participation as a subject is an excellent way to gain first-hand knowledge and deeper understanding about how psychological research is conducted. Students will complete a "research collaboration form" passed out in class for each experiment that they complete. The form requires the following information: 1) experiment title or the names of the researchers, 2) minutes/hours credit, 3) brief statement of the research hypothesis, 4) statement of the IVs & DVs, 5) problems or flaws in the experiment, and 6) personal reaction to the experiment.

An alternative to the experiment participation requirement is offered to those students who do not wish to be a research subject or are unable to schedule an experiment. This will involve a comparable amount of writing about research that the student will read. A handout will be distributed in class which fully describes what it to be done.

E. Portfolio Assignments

All students will begin a portfolio in Psychology 150. For psychology majors, work on the portfolio will continue until graduation, documenting their progress from their first psychology course through their senior seminar. A detailed description of this requirement is included in the *Psychology Majors' Handbook,* available in the departmental office. All portfolio work (including that of students who do not become psychology majors) will be kept in the department and may be used for departmental research and evaluation. The following work from this semester will be kept in a portfolio file for each student.

1. Critical Issues Essay I. In the first week of class, each student will write an essay of 300-500 words. The essay will specify what the student considers to be the critical issues or most important questions to be addressed by the discipline of psychology. Essays must be typed, double spaced, and pledged. The first essay will not be graded, but no other course work will be accepted until this first essay is turned in. Students are encouraged to keep their own copy of this and all work turned in.

Critical Issues Essay I
(300-500 words)
due Friday, 8/28 and again 12/9

Asking good question is usually much more important than having right answers, and understanding a discipline requires recognizing the critical questions that guide work in that field.

Think about what you have learned up to now about the discipline of psychology. In your judgment, what are the most critical and important questions that psychology faces? Explain why you consider these to be critical questions for the field.

2. Critical Issues Essay II. On the last class day students will turn in a second essay on the same topic as the first, this one informed by the thinking and learning that has taken place throughout the term. Essays must be within the 300-500 word limit, typed, double-spaced, and pledged. This final essay will be graded and will count 5% of the 150 course grade. Late essays will suffer a full-grade penalty.

3. End-of-Term Self-Assessment. By 5:00 p.m. on the day of the college-scheduled final exam, each student will turn in a typed, double-spaced essay describing what progress he or she has made during the term. This could include a straightforward listing of any new skills developed in or outside of course work in any classes. It should include an attempt to describe any significant changes that have taken place in the student's ways of thinking, perspectives or attitudes. Self-assessments will be used for psychology majors in the senior seminar to assess their cumulative accomplishments. The self-assessment essay may be any length and will not be graded. However, students who fail to turn this in will receive an incomplete for psychology 150.

III. Use of the Honor Code in Psychology 150

As in all courses at Rhodes, students are expected to act honorably in pursuit of our mutual educational objectives. Because exam questions are often used by multiple professors, copies of Psych. 150 exams are kept by the professors. It is considered a violation of the honor code to posses a copy of a 150 exam, or to be aware of copies in the possession of others. For other work, collaboration is encouraged on all out-of-class assignments. Therefore students are free to study together, to share notes, to discuss all assignments with one another or with others outside the class, to proofread and edit one another's work, and to give each other as much helpful feedback as possible.

IV. Schedule of Assignment and Reading Due Dates (following page)

	Day	Date	Reading	Topic	Assignment Due
1	W	8/26		**Introducing Psychology**	
2	F	8/28	TW1	Themes Within Psychology	Critical Issues Essay I Due
3	M	8/31	TW2	**Research Issues**	
4	W	9/2	H 92-100		
5	F	9/4			
	Labor Day				
6	W	9/9			**Exam 1**, part 1 (TW chapters 1-2)
7	F	9/11	TW3	**Biological Perspective**	
8	M	9/14		Heredity	SI 1 Due -- Op. Defs.
9	W	9/16			
10	F	9/18	TW4	Physiology	
11	M	9/21			
12	W	9/23	H 275-281	Drug action	
13	F	9/25	H 10-30	Sensation/Perception	
14	M	9/28			**Exam 2** (chpts3-5)
15	W	9/30	TW6	**Learning Perspective**	
16	F	10/3	H 61-75	Classical Conditioning	
17	M	10/5		Operant Conditioning	*Initial baseline for SI*
18	W	10/7	H 75-82		*data collection for SI 2*
19	F	10/9	H 260-268	real world applications	*data collection for SI 2*
20	M	10/12	TW7	Social Learning Theory	*data collection for SI 2*
21	W	10/14	H 82-91 H 190-199		*baseline for SI*
22	F	10/16			**Exam 3** (chpts 6-8)
	Fall Break				
23	W	10/21	TW9	**Cognitive Perspective**	
24	F	10/23	H 124-141	Piaget	SI 2 Due -- Behavior Modification
25	M	10/26	H 199-207		
26	W	10/28			
27	F	10/30	TW10	Memory	
28	M	11/2	H 108-123		Maze Data due
29	W	11/4	H 141-148 H 52-60		
30	F	11/6	TW11		**Exam 4** (chpts 9-11)
31	M	11/9	TW12	**Sociocultural Perspective**	
32	W	11/11	H 282--303	Social Context	
33	F	11/13	H 100-108		SI #3 Maze Learning Due
34	M	11/16			
35	W	11/18	TW13	Cultural Context	
36	F	11/20	H 148-155		
37	M	11/23	H 166-174		**Exam 5** (chpts 12-14)
	Thanksgiving Holiday				
38	M	11/30		**Psychodynamic Perspective**	
39	W	12/2	TW15	Personality & Freud	
40	F	12/4	H 222-245		
41	M	12/7	H 207-214 H 174-182	Health Psychology	
42	W	12/9	TW17	Themes and Issues across Psychology	Due: Critical Issues Essay II Exper. Participation Summaries Self-Assessment
Friday		**12/11 1:00 - 3:30**		**Exam 1, part 2** (chpts 15-16)	**and Final Exam**

Student Investigation #1:
Operational Definitions

Dr. Ackerman
due 9/14/98

Many of the attributes or traits of interest to psychology can be measured in many ways; biological/physiological, self-report questionnaires, report-by others. For example, if I am interested in depression, I could perhaps assay blood looking for a particular substance correlated with depression. Or, I might ask questions about how someone is feeling, etc. Often our first assessments are made as a function of observing behavior. The purpose of this exercise is to have you some first-hand experiences with the construction of operational definitions, and assessing the data generated from observations based on these definitions in terms of reliability and validity.

I want you to create and assess an operational definition of *friendliness*.

1. Make up an operational definition of *friendliness* based on observable behavior. Constrain yourself to a measurement that can be made after only a few minutes of observation.

2. Select a partner, preferably another member of this class. Designate one of you Observer A, and the other Observer B.

3. Choose a setting in which you can observe two individuals involved in some public behavior. Make sure that you choose an observation setting in compliance with the APA Ethical Guidelines, and with your own ethical principles.

4. First, both observers should observe the first subject for five minutes using the first definition of stress. Each of you will then have a score for Subject One based on Definition A, based on observing the same five minutes.

5. Next, both observers should observe the same subject, again for five minutes, but this time using the operational definition of Observer B. Now each of you will have two scores for Subject One.

6. Repeat steps 4 & 5, observing a different subject, Subject Two, in the same setting as was used for Subject One. Now each of you will have two scores for Subject One (one for Definition A & one for Definition B) and two scores for Subject Two.

7. Compare your friendliness scores to you partner's. How reliable were your observations? Graph your data to show this. Given the amount of variability you obtained between the two observers, which of the two operational definitions do you conclude is the most reliable? Why do you think that operational definition proved to me more reliable?

8. Discuss the validity of your measurements, comparing the two operational definitions. What are the strengths and weaknesses of each of these methods for assessing *friendliness*? Which of the two operational do you conclude is more valid and why?

Student Investigation #2
Behavior Modification
due Oct. 23

I. Select a behavior that you wish to modify. You will probably want to choose a fairly simple behavior whose frequency you wish to increase or decrease.

A. You may select one of your own behaviors or a behavior of someone with whom you spend a great deal of time. If you choose to modify someone else's behavior, you must get his or her permission first.

B. It is important to select a behavior that occurs with considerable frequency every day, because this project covers so short a time span.

II. Define your behavior explicitly. (Remember earlier comments & criticisms about operational definitions.)

III. Design an operant conditioning program

A. Will you use reward, punishment, or extinction?
Carefully select and describe your reward or punishment contingencies.

For example, If I wanted to decrease my consumption of cokes/sodas, I clearly need to use punishment. I could remove some pleasant activity contingent on my drinking sodas (ie no ice-cream at dinner = negative punishment) or, I could do something more drastic and immediate such as drinking only warm sodas, or putting a bitter/unpleasant substance into the soda (positive punishment). These two contingencies will result in very different outcomes, at least theoretically. Think about these when you chose your behavior modification program.

B. Select a schedule of reinforcement. Ratio or interval? Variable or fixed? Describe carefully and be clear as to the long term implications of continuous versus intermittent contingencies.

IV. Keep a baseline record of your behavior for at least 3 weekdays
(Wednesday 2/18 - Friday 2/20)

V. Implement your conditioning program for the next 5 weekdays
(Mon. 2/23 - Friday 2/27).

VI. Return to baseline assessment for the next 3 consecutive weekdays
(Mon. 3/2 - Wed 3/4) (You should be very clear as to the purpose of the two baselines & what comparisons can be gained from them.)

VII. Your project report should describe your program and your results. Show your results in a graph. In the results, provide means for the behavior for each of the three time periods. Discuss what you have learned about operant conditioning. Why did or didn't your program work? Did your schedule affect the outcome? Did you have a delay in contingencies? Consider you choice of schedules & contingencies. In retrospect, what changes would you have made in your conditioning program

Student Investigation #3
Maze Learning

data due 11/2, paper due 11/13

The attached experiment provides a way of testing two alternative theoretical explanations--learning theory Vs cognitive-- for what is being learned when one solves a printed maze. With repeated trials, performance shows a steady decrease in completion times and errors, thus demonstrating the usual learning acquisition curve. The test of the two explanations comes when two special trials are run, one in which the maze is worked backwards, and one in which the maze is worked when the most of the maze is masked, or hidden from view.

You should work the 6 copies of the maze I have attached according to the instructions in the experimental description. Be sure you understand the instructions thoroughly before you begin and that you follow these instructions carefully. It is especially important that you do not count errors until all 6 copies of the maze have been completed.

You should provide me with your completion times and errors using the form on the bottom of this sheet. (It is imperative that you report your time in seconds rather than in minutes!) These data should be returned to me by Thursday, March 26. I will take all the class data and enter it into a spreadsheet. I will then generate the learning acquisition curve derived from the class data, as well as the mean (average) completion time for each of the 6 trials. I will run the appropriate statistics (t-tests) to determine which means are significantly faster than others. Of particular importance will be the two special conditions, Backwards and Masked, compared to Trial 1 and Trial 4. I will present these statistics to you on April 2, and you will have until April 12 to complete your SI paper.

Be clear about this-->the purpose of this study is to compare two alternative explanations about what is being learned. The data will actually allow you to draw the appropriate conclusions. But you should be very clear as to how the two special trials, Backwards and Masked, actually test the theoretical explanations. Thus, you need to read the description of the experiment several times until you are sure you can articulate what each explanation expects to occur on the special conditions.
For example, which of the following describes the completion times predicted by learning theory, and which from cognitive?

Trial 1> Trial4	
Trial 1 = Masked	Trial 4 ≥ Masked
Trial 1 = Backwards	Trial4 ≥ Backwards
Backwards > Masked	Backwards < Masked

- ⇓ due 11/2

Name _____

Trial	Time in **Seconds**	# Errors
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
Backwards	_____	_____
Masked	_____	_____