Psychology 201: Mind and Brain

Spring term, 1995

Lecture Coordinator: Steve Keele, 221 Straub. Office Hours: 10:00-11:30 M, 8:30-11:00 W & F. E-mail address: skeele@oregon. Other times often are available on M-F, but should be preceded by a phone call.

Laboratory Coordinator: Katie Pears, rm. 485 Straub, 6-4966

Laboratory Instructors: ShuYeu Lin (6-4993, Rm 326 Straub, e-mail: shuyeu@oregon), Michael Crowley (6-4912, e-mail: mcrowley@oregon), Dan Degrandpre (6-4990, Rm. 320 Straub, e-mail: dd1i@darkwing), Barbara Defillippo (Rm. 220 Straub, e-mail: barbarad@oregon). *Please use e-mail whenever possible for questions or setting appointments.* Office hours will be announced at lab meetings.

General Description

This course provides a general introduction to aspects of psychology dealing with the nature of the human mind and its biological basis-- aspects such as perception, attention, and memory. The course has three components-- book, lectures, and laboratory. Each component serves rather different purposes. The book by Bernstein, et al entitled *Psychology*, broadly surveys the field, introducing students to a large variety of concepts, topics, and modes of thought in psychology. The same text is used this year in Psych 202. Both the book and the accompanying *study guide* by Schoppert are required.

Lectures will provide detailed *case studies* of how psychologists think about particular modern issues. A number of psychologists from the Oregon department will present lectures. Psychologists in this department are world leaders in their disciplines, all working at the frontiers of their specialities. They are in unique position to describe some of the exciting things that are happening right at the present in psychology, providing a sense of where the field is going and how psychologists think about problems when they are working at the frontier. A major research university like Oregon provides a kind of education that is less available at colleges where the teachers are not immersed in research. We at a research university try to teach students not just the established ideas, as are so often presented in textbooks, but how to think in a scientific way. This kind of teaching will become especially valuable to students as we are move into a world more dominated by the necessity for scientific thinking. The lecturers do not attempt to explain material in the book. Book reading is the responsibility of the student alone. The study guide is an invaluable aid in reading the book, and it should be purchased as well.

While lectures help students learn how to think in scientific terms, laboratories provide more hands-on experience with the workings of research. The laboratories are not intended to be discussion sections for the book. The laboratories do bear relationship to the lectures. While it is not possible in introductory laboratories to provide the technology and sophistication of modern scientific studies, it is possible to give a flavor of how hypotheses are generated and how experimental work can be used to evaluate the hypotheses.

Please note that the last exercise in the Laboratory sections is an article by Sachs called "An Anthropologist on Mars" which will be made available at the reserve bookroom of the library.

Exams and Grading Policy

The grading for the course will be based both on points from exams and points from laboratories. The exams will have only multiple-choice questions and will cover both readings and lectures. There will be four exams, the first covering chapters 1, 2, and 4 of the Bernstein book and lectures up until the time of the exam, the second covering chapters 5, 6 and 7 and lectures between the first exam and the second, and the third covering chapters 8, 9, and 10 and lectures between exams 2 and 3.

The first three exams will each have 30 questions based on the book. *Of those 30 questions, 10 will be selected from the study guide. The study guide has answers for the questions.* The first exam will have 6 questions based on lectures, and the second and third exams will each have 10 questions based on lectures. There will also be a fourth exam administered on the last day of class with 5 questions that cover the preceding three lectures. The questions based on the lectures will have double credit, to provide greater reward for attending class. Thus, in total the exams will be worth 152 points, 90 based on the book and 62 based on lectures. The final grade will depend on the total number of points from exams and from the labs as shown in the table below.

In addition to the final grade schedule, a minimum number of 14 points must be achieved on the book-based questions from each exam. No matter how well a person does on subsequent sections of the course, a failing grade for the course will be assessed unless the minimum standard is met for **each** of the three sections. If the minimum standard is not met, a student will have one opportunity for a makeup exam. Also, if a student is not satisfied with the initial score or misses the initial exam, the makeup may be taken. The score on the makeup will replace the initial score regardless of whether it is better or worse. Note that the makeups will have only 30 questions, all based on the book.

To do well in the course, it will be necessary to attend the lectures, because questions will be based on them. This course does *not* make available Student Footnotes.

The laboratory component of the course has 5 major exercises. These will be explained in more detail by the lab instructor at the appropriate time. However, each of the 5 exercises can yield a maximum of 15 points. In calculating your final points for the laboratory component, the lowest of laboratory scores will be omitted. Thus, the maximum lab score is 60 points. If you must miss your scheduled laboratory session, it is possible to make up *one and only one* by going to another laboratory section. You must get advance permission to do so from your lab instructor. A missed lab section might also be the one that is discarded as having lowest score of the 5 lab sessions.

Total points available in the course are 212. The minimum number of points needed for each grade is as follows:

Grade Scheme

A B C D F179 156 123 106 <106

Plusses and minusses will be appended to grades within two points of a cutoff. For example, 179 and 180 would yield an A-; 177 and 178 would yield a B+. Recall that to obtain a passing grade the minimum standard of 14 points must be met on the book portions of each of the three major exams.

Research Participation Requirement

The department requires that students in each introductory psychology course participate in three experiments, or as an option, produce a short paper. The rationale is to provide experience in real research. A second reason involves a kind of social contract. The vast bulk of psychological research is done with human subjects, much of that with students. Were this not done, there would be substantially less known in the field of psychology. Thus, to engage in the learning process invokes an obligation to participate in the knowledge production process.

The experiments are all ones that have been approved by a Human Subjects committee.

If you choose to write a 1-2 page paper instead of participate in experiments, it must be based on research related to topics covered in Psych 201 and from the library or other scientific sourses. The topic must be approved in advance by your lab instructor.

Failure to participate in one experiment (or write the paper) will result in a loss of 4 points in your total for the course. Failure to participate in two experiments will result in another loss of 4. Failure to participate in any will result in an incomplete in the course.

Further details on research participation will be provided at the first class meeting.

Calendar of Lectures and Exams

| Tuesday May 2 | Exam: Chapters 5, 6, 7 |
|---|--|
| Thursday April 27 | Tucker Imaging the Human Brain During Thought |
| Tuesday April 18 Thursday April 20 Tuesday April 25 | Keele Codes of Reading in Mind and Brain Keele Keele |
| Tuesday April 18 | Makeup Exam Chapts. 1, 2, 4 (follows lecture) |
| Thursday April 13 | Barbara Gordon-Lickey Plasticity in the Nervous System |
| Tuesday April 11 | Exam: Chapts. 1, 2, 4 (Note: skip Chapt. 3) |
| Thursday April 6 | Kimble New Approaches to Brain & Behavior |
| Thursday March 30 Tuesday April 4 | Marvin Gordon-Lickey Introduction to the Nervous System Marvin Gordon-Lickey |
| Tuesday March 28 | Keele Introduction to the course |

Thursday May 4

Keele-- Topics of Memory

Tuesday May 9

Makeup Exam: Chapters 5, 6, 7 (follows lecture)

Tuesday May 9 Thursday May 11 Keele-- Memory continued

Keele

Tuesday May 16 Thursday May 18

Frisch-- Decision Making

Frisch

Tuesday May 23

Exam: Chapters 8, 9, 10

Thursday May 25 Tuesday May 30

Moses-- Origins of the Concept of Mind

Baldwin-- Children's Acquisition of Language

Thursday June 1

5-question exam on preceding 2 lectures Plus essay exam on Sach's article. Makeup Exam on

Chapts. 8, 9, 10

Laboratory Schedule

March 27-March 31:

No labs

April 3-14:

Introduction to Statistics (two weeks): Read Chapt. 2

April 17-28:

Two-point threshold and relationship to issues of plasticity (two weeks) Indirectly related to lectures by Barbara Gordon-

Lickey

May 1-5:

Levels of Processing (data acquisition): related to lectures on

Memory by Keele

May 8-12:

Decision Making (data acquisition): related to lectures on decision

making by Frisch

May 15-19:

Levels of Processing (discussion)

May 22-26:

Decision Making (discussion)

May 29-June 2:

Read & discuss: An Anthropologist on Mars by Oliver Sachs (concerns the nature of autism with a focus on an unusual case;

related to lectures by Moses and Baldwin)

Note: an essay question on the article will be

administered on June 1 and will form part of the lab

grade

ALTERNATE ASSIGNMENT FOR RESEARCH PARTICIPATION REQUIREMENT

* If you decide that you do not want to participate as a subject in three hours of research, you have the option of completing the following assignment:

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- 1) Find three research articles that pertain to this course. They must be scholarly journal articles (as opposed to Newsweek, Psychology Today, Time, etc.). An example of a scholarly journal is the *Journal of Experimental Psychology*. If you have any doubt whether a journal is a scholarly journal, contact your section leader. There are several journals that pertain to the topics discussed in this course.
- 2) Summarize each of the three articles; include the following:
 - a. At the beginning of each summary, include the APA citation of the article (see below for an example).
 - b. What is the hypothesis (or hypotheses) of the study?
 - c. Who are the subjects?
 - d. How did the researchers test the hypothesis?
 - e. What were the results of the study?
 - f. How did the results match the hypothesis?
 - g. Why is the topic/study important (to the field in general)?
- 3) Be sure to include a copy of each article.
- 4) Your summaries must be double-spaced and typed.
- 5) Your summaries must be approximately one to one and a half pages long for each article.
- * APA citation:

Gray-Little, B. & Burks, N. (1983). Power and Satisfaction in Marriage: A Review and Critique. *Psychological Bulletin*, 93, 513-538.