

**Psychological Research Laboratory  
PSYB01F, 1996**

Professor G. B. Biederman, Instructor (Rm. S-560A, Tel: 287-7433)  
V. A. Davey, Tutorial Leader (Rm. S-560, Tel: 287-7434)  
J. LeBoutillier, Course Assistant (Rm. S-150A, Tel: 287-7449)

**Office Hours (Biederman) (PSYB01 only: Wed 2-7pm) S560A  
Office Hours (Davey) (PSYB01 only: Wed 5-7pm) S560**

**Lecture hours:** Wednesdays 7-9 p.m.

**Tutorial hours:** Wednesdays 9-10 p.m. **Dates TBA**

**Laboratory hours:** TBA, Room S-316 (see Rules for Use of the Computer lab)

**Texts:** All texts are on reserve in the Bladen Library in reasonably good quantities. It is **not** a requirement that texts be purchased (but copies of all are available in the bookstore or can be ordered.)

1. Leibert R.M. & Leibert, L.L. (1995). An introduction to methods of psychological research, fourth edition. Englewood Cliffs NJ: Prentice Hall.
2. Biederman, G.B. (Ed.) (1991). Methods and strategies in psychological research. Toronto: Canadian Scholars' Press.
3. Biederman, G.B. (Ed.) (1995). Experimental design in psychological research: Issues and advances in method and measurement. Toronto: Canadian Scholars' Press. Assignment pages in this text below are text pages, **not** article pages.

**Lecture Schedule:**

- SEPT 11 Introduction 1: Ch1, 2, pp.1-36; Ch3, pp.37-41; 3: pp.1-7.
- 18 Experimentation in psychological research. 3: pp.7-11; 1: Ch7, pp.120-140.
- 25 Non-experimental research designs. 1: Ch9, pp.165-191; 2: Ch2, pp.55-59.  
Conducting field research. 2: Ch3, pp.61-86. 1: Ch10, pp.192-206.
- OCT 2 **Exam 1 (20%) Covering material from 9/11 to 9/25.**
- 9 Measurement and analytical issues: Sampling, reliability, validity,  
1: Ch3, pp.41-119. Meta analysis, 1: Ch10, pp. 215-217.
- 16 Psychophysics. 3: Ch3, pp.35-44, pp.49-69.
- 23 Psychophysics continued.
- 30 **Exam 2 (20%) covering material from 10/16 to 10/23.**
- NOV 6 Methods in operant and classical conditioning. 2: Ch5, pp.183-261.
- 13 Methods on operant and classical conditioning (continued)
- 20 Current topics: REINFORCING EFFECTS OF INFORMATION: 3: pp.73-89.
- 27 Current topics: METHODS IN OBSERVATIONAL LEARNING: 3: pp.91-113
- DEC 4 Current topics: OBSERVATIONAL LEARNING, cont., 3: pp.115-121. and  
CONDITIONED ANTISICKNESS: 3: pp.123-135.
- TBA Final Exam (40%) Covering topics from 11/6 to 12/4, and major methods issues from overall course material.**

**Tutorial Schedule (dates TBA):** (Tutorials conducted by Dr. Davey) Tutorials follow each 2-hr lecture at 9pm and are mandatory in that about 10-15% of each exam will arise from discussions that have taken place in the tutorials. The main purpose of the tutorials are to clarify any issues which may have arisen in that evening's lecture or any preceding lecture. In addition, on **September 25** the logic and method of report writing will be discussed (Assignment: 1: Ch11, pp. 207-234). On **November 6** the use of Pavlovian controls will be further analyzed and on **Nov 20 and 27 and Dec 4** (2: Ch. 5, pp.207-210 to be read before tutorial) the issues arising from each of the "Current topics" lectures will be reviewed and discussed.

**Laboratory Schedule:**

- I. REACTION TIME (Part 1) including:  
(Purpose including rationale, expected outcomes; Method) **Due date: October 9 (5%)**
- II. REACTION TIME (Part 2) including:  
(Results, Discussion) **Due date: November 6 (5%)**
- III. CLASS ORIGINAL (Complete Report): **Due date: December 6(10%)**

The laboratory in PSYB01 uses computers, in a "user friendly" setting, and permits you to work at your own pace as much as possible. The laboratory assignments, procedures and requirements will be fully discussed in tutorial and lecture. "Write-ups" of laboratory work will be required increasing in complexity and length, but we will give you very direct instruction and assistance. Because of the size of the course deadlines are taken seriously. Penalty for lateness is 20% of value of the report per day. No report will be accepted after the graded assignment is returned to the class.

**Course Purpose:** The purpose of this course is to present principles of scientific method as they apply to research in experimental psychology. The core of this goal lies in the logic of the design of experiments. Topics will include generating research problems, experimental control, subject sampling, scaling and measurement, interpretation and evaluation of results, theory construction, and the communication of scientific knowledge through research report writing. The social nature of experimental work and ethical issues in research will be discussed throughout the spectrum of research that constitutes experimental psychology. Examinations will be of the multiple choice and/or short answer variety. **Examination questions will be directly drawn from Lectures and Tutorials and from Text 1 only.**

## Laboratory Rules for PSYB01 Students:

The laboratory in PSYB01, Room S316, will be open 24 hours per day to registered students in PSYB01. We expect you to work independently and responsibly and to immediately report any violations of the rules to your instructor or to your teaching assistant for your own safety and security. Your anonymity will be respected.

The following is a list of rules which we expect all users of 5-316 to follow at all times. Individuals who disregard any of these rules will be immediately denied the privilege of using the facility. Note that there will be no "warning;" the first time a rule is broken, suspension of privileges will occur. If everyone cooperates and follows these very reasonable rules, there should be no problems at all,

1. At no time is there to be any drinking, eating or smoking in this room. All of these substances can seriously damage computers and associated hardware.
2. Please leave the area where you worked completely clean. This means that you should dispose of paper, etc. when you leave.
3. Under no conditions should students not registered in PSYB01, PSYB02, PSYC34, or PSYC58 be admitted to this room. This is not a general study room; it is a laboratory working area for students in these courses.
4. Keys may be picked up at the front desk (for which you must surrender your student card), and must be returned there when you are through working in the room. The door is never to be left unlocked. Never leave the door open or unlocked when you leave the room, even if you are coming back right away. Please do not hoard the keys; return them and you can pick them up again later. Students working in S-316 may admit only other students who they recognize to be in one of the four designated courses. If you are not sure, please do not admit the person.
5. Never attempt to repair or otherwise tamper with the computer equipment. Leave a note on the machine if you think there is a problem and we will fix it for you as soon as possible.
6. You must never tamper with the programs stored on the hard disk (C drive) in these computers. No information is to be stored on the hard disk by students for any reason whatsoever. Of course, it is against copyright law to copy the system software from the C drive.
7. When you are leaving, please be sure to leave the computer in perfect condition for the next user. This means turning off three power switches -- computer, monitor and printer. Always do this unless someone is waiting in the room to take over that computer when you leave.