

NOTE: If, during the course of the term, you have any assignments to deliver to me, put them in my box in the second floor of Huestis. Huestis is open from 8-5 Mon.-Fri. Do not put them in my box in Straub. If you use the Straub box, I will not receive your assignments and you will not get credit for them. You may put items for Paul Laurey in his box in Straub.

PSYCHOLOGY 304, BIOPSYCHOLOGY, Fall 1997

INSTRUCTOR: Barbara Gordon-Lickey, 229 Huestis, 2-4 Mon.

TEACHING ASSISTANT: Paul Laurey, 489 Straub, 1-3 Mon.

MEETING TIME AND PLACE: 11:00-12:20, Tue and Thur, 152 Education

IMPORTANT DATES:

First midterm: Oct 21

Second midterm: Nov 13

Final exam: 10:15 am Monday of exam week.

REQUIRED TEXT:

Selected chapters from Kalat, JW, *Biological Psychology*, fifth edition

CLASS ATTENDANCE: Material will be presented in class that is not in the reading. You are responsible for this material, so please come to class. Attendance at labs is required; you will lose points if you do not attend.

OFFICE HOURS:

Ms. Gordon-Lickey. Room 229 Huestis; email: bgl@uoneuro Office hrs: Monday 2-4, or by appointment. Phone x 64904, but you will get more reliable and prompt replies to email communications. I will be happy to talk to you after class on Tuesdays to answer questions or set up appointments. On Thurs. I have another class immediately after this one and will not be able to talk to you after class.

Mr. Laurey. Room 489 Straub; Office hrs: Monday 1-3. Phone: 346-1989

WEB PAGE: There will be a web page for this course at:

<http://darkwing.uoregon.edu/~barbgl/psy304/>

This will have lecture outlines and other information relevant to course requirements. You will be responsible for material posted here so consult it at least weekly.

EXAMS:

Exams will consist of multiple choice questions. Machine scored answer sheets and paper will be provided, but please bring your own pencil. Because this is the first time I have taught this course, I will not be able to provide you with old exams. I will, however, try to provide some study questions (not multiple choice) for each topic.

LABS

There are four hour labs. This segment of the course is under the supervision of Mr. Laurey. In the labs you will get more visual experience with neuroanatomy and neurophysiology. A brief lab syllabus follows. The sessions labeled review are optional. The sessions labeled Lab are required and you receive points for attending and handing in the assignment.

Lab 1: (week of Oct. 6) Launching your writing project

Lab 2: (week of Oct. 13) Computer simulation of action potential and post synaptic potentials.

(week of Oct. 20) Review

Lab 3 (week of Oct 27) Identifying parts of the brain.

(week of Nov. 10) Review

Lab. 4 (week of Nov. 17) computer simulation of receptive fields.

(week of Dec. 1) Review.

PAPER. A short paper (3-5 pg) is required. The paper requires you to demonstrate that you understand scientific inference, that is, that you can tell when a fact is evidence for a conclusion. The paper will also enhance your skills of precise thinking and communication. Take one subject covered in the course and think of a question about that subject that was not covered in lecture or reading. Describe how you would plan an experiment to answer that question. The details will be discussed more in the first lab meeting.

Paper grading criteria

- 1 Logical design of experiment. Can it answer the question you pose?
- 2 Clarity. Can we determine precisely what you are asking, what you propose to do and how you will interpret various possible outcomes?
- 3 Mechanics of English

GRADING

Midterm #1 20%

Midterm #2 20%

Final 30%

Paper 20%

attendance at labs and handing in lab assignments: 10%

Unexcused failure to take an exam or to submit an assignment on time will result in no credit for that part of the course. Any nonmedical rescheduling of the paper, exams, or quizzes must be arranged by Oct. 10 and be justified by good cause. (Having plane tickets or other transportation home prior to the final does not constitute a good cause.) Rescheduling required by the student's medical problem or a medical problem in student's immediate family must be substantiated by a document signed by a health care practitioner on professional stationary.

LECTURE MEETINGS AND READING ASSIGNMENT

1. Sept. 30: Introduction to basic issues in biological psychology
reading: Chap 1
Sept. 30: continued. Description of nerve cells.
reading: Chap 2 pp 26-39.
- 2 Oct. 2 Resting potential
- 3 Oct. 7 The nerve impulse
reading: Chap 2, pp 40-55
- 4 Oct. 9 Synapses
reading: pp 56-81
- 5 Oct. 14 Transmitters and pharmacology
reading: pp 82-93
- 6 Oct. 16. Metabotropic synapses
7. Oct 21 Anatomy
pp 94-141
8. Oct. 23 development of the brain
reading: pp 144-164
9. Oct. 28 FIRST MIDTERM (covers through metabotropic synapses)
10. Oct. 30 Sensory coding
reading: pp 180-182
11. Nov. 4 retina
reading: pp 183-195

12. Nov. 6. visual receptive fields and visual deprivation
reading: 196-213, 221-229
13. Nov 11 Muscles and muscle receptors
reading: 273-283
14. Nov. 13 motor pathways
15. Nov 18. SECOND MIDTERM
reading: pp285-307
16. Nov. 20 hormones
reading: 380-413
PAPERS DUE
17. Nov. 25 lateralization and language
reading: pp 486-523
18. Dec 2. schizophrenia
reading: pp 563-579
19. Dec. 4 catchup and overview