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.

Psy 445, Brain Mechanisms of Behavior
Fall 1997
Instructor: Professor Barbara Gordon-Lickey
Text: Carlson, *The Physiology of Behavior, fifth edition*
Packet obtainable from bookstore.

Office hours: Monday 2-4
e-mail: bgl@uoneuro

09/29/97	Mon Introduction to course and begin resting potential pp 1-18, 19-30
09/30/97	Tues resting potential pp 30-35
10/01/97	Wed action potential pp 35-45
10/03/97	Fri conduction of the action potential
10/06/97	Mon synaptic transmission pp 47-60
10/07/97	Tues metabotropic receptors gene expression from synaptic activation review pp 54-55
10/08/97	Wed pharmacology pp 60-74
10/10/97	Fri synapses make simple circuits review 40-45
10/13/97	Mon basic neuroanatomy pp 78-106
10/14/97	Tues anatomy demonstration
10/15/97	Wed review
10/17/97	Fri EXAM
10/20/97	Mon somatosensory pp 201-206
10/21/97	Tues pain pp 206-212
10/22/97	Wed pain pp 206-212

10/24/97	Fri retinal receptive fields
	pp 142-152
10/27/97	Mon visual pathway and receptive fields in V1
	Mason and Kandel pp 45-64 in packet
10/28/97	Tues form and movement
	pp 166-179
	Kandel pp 65-78 in packet (one pg is missing, I'll copy it)
10/29/97	Wed plasticity in developing visual system
	Purves pp 1-19 in packet
10/31/97	Fri hearing
	pp 182-198
11/03/97	Mon hearing
	pp 182-198
11/04/97	Tues spinal cord reflexes
	pp 226-234
11/05/97	Wed review
11/07/97	Fri EXAM
11/10/97	Mon motor cortex
	Ghez pp 79-95 in packet
	PAPERS DUE
11/11/97	Tues paper talks
	4 paper talks
11/12/97	Wed motor cortex
	Ghez pp 79-95 in packet
11/14/97	Fri cerebellum
	Ghez pp 97-117 in packet
11/17/97	Mon basal ganglia
	Cote and Crutcher pp 119-131 in packet
11/18/97	Tues paper talks
	4 paper talks
11/20/97	Wed schizophrenia
	pp 542-557
11/21/97	Fri schizophrenia
11/24/97	Mon learning- hippocampus
	pp 482-509
11/25/97	Tues learning -LTP
	pp 447-461
	Purves pp 21-43, but skip details of simple nervous system
11/26/97	Wed discuss schizophrenia treatments
12/01/97	Mon learning -LTP
12/02/97	Tues paper talks
	4 paper talks
12/04/97	Thurs review
12/05/97	Fri EXAM

DURING TIME SCHEDULED FOR FINAL WE WILL COMPLETE PAPER TALKS ATTENDANCE IS REQUIRED.

Pages given without source are in Carlson. For pages in packet the authors of the chapters are given.

Course requirements:
1. There will be 3 hour exams counting **20%, 20%, and 20%** of the course. There will be no final. You may bring one page (8.5" X 11", 2 sides) of notes to use during each exam.

2. There will be short essay assignments given out at random times. Each will be due the class after it is given out unless otherwise announced. I will not grade these short essays, but I will read them and will discuss them in class. There will be no makeups for missed assignments, but you will get full credit for this part of the course even if you miss 2 assignments. These assignments will count **10%** of the course.

3. An essay of about 5-6 pages. A title, half page outline, and 3 references are due Oct. 31. These will be returned by Nov. 5 with suggestions or, occasionally, a statment that your project is not suitable. The preliminary title, outline and references count **5%** of the course.

The completed essay is due Nov 13. There will be a penalty of 1/3 grade for every day the essay is late. and the completed essay counts **20%** of the course. During the last 2 weeks of the course, you will give the class a 5 min talk on your essay. This will be worth **5%** of the course. ATTENDANCE ON THE DAYS WHEN YOUR COLLEAGUES GIVE THEIR PAPER TALKS IS ABSOLUTELY REQUIRED. Your course grade will be reduced by 1/3 of a grade for each such session that you miss, unless you have an excuse from me.

Your essay should be an imaginary research project containing a series of experiments (2 or 3) related to one of the topics we discussed in class. You should include an introduction to the problem, methods, possible results (consider more than one possibility), an interpretation of each of the possible results.

Other notes:
1. If you do not have the prerequisite, please talk to me. The prerequisite is psychology 304 or biology 360, or an equivalent course at another university.
2. The lecture outlines, study questions and other materials will be on a web page. You are responsible for material on this page. Consult it frequently. Its address is: http://darkwing.uoregon.edu/~barbgl/psy445/

Suggestions for success in this course.

1.Do the reading before you come to class. Be prepared to ask questions about points in the reading you did not understand. I will make time for this.
2. Remember that both reading and lectures are important. I will present material in class that is not covered in the reading. The lectures will also give you an idea of what to emphasize in your studies

and how to organize the material. Therefore, come to class every time.
3. Throw away the yellow underliners. Underlining is not the same as understanding. Instead, when you have finished a section of reading, close the book and write down the important points. Then check your summary against the book and your notes.
4. Before tests make a new summary of each section that integrates the material in the book with the material in class.
5. I will give you a copy of one of last year's exams. It is a guide, but note that course content varies from year to year. Note that the questions ask for quite specific information. Many of them require that you provide experimental evidence that supports important conclusions. You will not do well in this class if you learn only vague generalities.
6. One good way to study for tests is to imagine that you are making up a test. What would you ask and how would you answer it?