

**Introduction to Brain and Behavior: Ben Franklin Scholars Section
BIBB 109/ PSYC 109/BIOL 219 - Fall 2008**

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Textbook: Bear, Connors, Paradiso (2006) Neuroscience Exploring the Brain (3rd ed) Books are available at University Bookstore. ISBN 0-7817-6003-8

Blackboard: This site has been set-up to facilitate student participation and communication with other students, their teaching assistants and the instructors. Lecture slides and announcements will be posted on this site.

Recitations: All recitations/labs will meet in room A3 Solomon Psych Lab Bldg with the exception of **Lab 1** which will meet in DRL Room BS3 (PC Lab1) . You may not attend another recitation. There will be mandatory quizzes during the lab weeks (noted on course schedule, below).

Examinations: There will be two non-cumulative examinations and a cumulative final exam. The University recognizes religious holidays. If there are students who have a problem with the schedule date for an exam, they must take the exam the day before the scheduled examination date. Please see the TA or Dr. Flanagan-Cato during the first week of classes. No makeup exams will be given unless students present a *bona fide* excuse. All acceptable makeup exams must be scheduled with the Head TA. Regrading - It is within your right to request that an exam question be re-graded. Any such request for re-grading must be given to the TA within one week after the exam is returned. *You may write your exams in pencil, but no exam written in pencil will be re-graded.* Any such request will result in the reexamination of the grading of the entire exam.

Grading: The final grade will be based on two exams = 20% each, cumulative final = 30%, lab quizzes = 10%, and journal club participation = 20% of final grade.

Format: Most of our class time will be lectures. Students are strongly encouraged to ask questions during these lectures. We will also have three “journal club” classes where students will present neuroscience knowledge to classmates in different formats.

Goals: This course has three major goals: 1) Survey the broad field of neuroscience, 2) Develop knowledge of neuroscience principles (brain structures, neurochemistry, electrophysiology); 3) Develop skills in scientific communication. The third goal is unique to the BFS section of the course, and will be the focus of the “journal club” class meetings. Groups of five students will be assigned a neuroscience research article to present to the class as either a scientific poster, a newspaper article, or a lobbyist presentation to a lawmaker.

Class Schedule:

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
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1	Wed	9/3	Introduction	1
		9/5	Cell Biology/Membrane Potentials	2,3
2		9/8	Signal Transmission	4
		9/10	Signal Transmission	5, 6
		9/12	Neurotransmitter Release	
3	Lab 1*	9/15	Ion channels and receptors	
		9/17	Functional Synapses	
		9/19	Simple Neural Circuits	
4	Lab 2	9/22	Organization of the CNS	7
		9/24	Overview	
		9/26	Exam 1	
5		9/29	Principles of Sensory Processing	8
		10/1	Olfaction	8
		10/3	Taste and Audition	
6		10/6	JOURNAL CLUB 1	11
		10/8	Vision	9
		10/10	Vision	10
7	Mon	10/13	FALL BREAK & 10/14	
		10/15	Vision	12
		10/17	Pain	
8	Lab 3	10/20	Movement	13
		10/22	Movement	14
		10/24	Movement	
9	Lab 4	10/27	JOURNAL CLUB 2	15
		10/29	Biological Mechanisms of Sleep	19
		10/31	Circadian Rhythms	
10		11/3	Exam 2	
		11/5	Reproduction	17
		11/7	Reproduction	
11	Lab 5	11/10	Emotion	
		11/12	JOURNAL CLUB 3	
		11/14	Memory	24
12		11/17	No Class	
		11/19	Learning & Memory	
		11/21	Learning & Memory	25
13		11/24	Learning & Memory	
		11/26	THANKSGIVING HOLIDAY	
		11/28	Motivation	16
14		12/1	Energy Balance	14
		12/3	Energy Balance	
		12/5	Hydration	

Summaries & Conclusions

* Lab 1 will meet in room BS3 in DRL. This room is also known as the PC Lab 1.