

P S Y C H O L O G Y 3 1 9
B R A I N A N D B E H A V I O R
S p r i n g S e m e s t e r 2 0 1 0

INSTRUCTOR: Kenneth J. Sufka, Ph.D.
Professor of Psychology and Pharmacology

OFFICE: 311B Peabody Building OFFICE HRS: TTh 11-12:00, by appt. & whenever the office door is open
PHONE: 662-915-7728 E-MAIL: pysufka@olemiss.edu (be mindful when using this)

CATALOG DESCRIPTION: Structures and function of the nervous system as it relates to a variety of behaviors and mental processes such as sensation, movement, sleep, hunger, learning, mental disorders, language and consciousness.

COURSE OBJECTIVES: This course is designed to provide students a strong foundation in biopsychology. The main objective is to provide you with *current* and *accurate* information about the relationship between brain and behavior. Knowledge in this field is growing exponentially as improved technologies give rise to amazing discoveries. Further, current discussion of human and animal behavior, cognition and emotion typically include brain functioning. As the course progresses, I hope you will come to share my *passion* and *curiosity* of brain studies. I trust that you will enjoy the course and I am certain that you will learn much.

COURSE TEXT AND ANCILLARY MATERIALS:

- *Physiology of Behavior*, 10th ed., by N. Carlson; Allyn and Bacon, 2010 - **required**
- *Brain and Behavior Multimedia Lecture Supplement (The Red Book)*, by K.J. Sufka; UM Printing Service, 2008 – **required (sold only at UM Student Union)**
- *A Colorful Introduction to the Anatomy of the Human Brain*, 2nd ed., by Pinel & Edwards; Pearson, 2007 – **optional study guide**
- Five (5) NCS No. 16485 Scantrons (purple) and #2 lead pencils for exams.

COURSE ATTENDANCE: I strongly urge you to attend every lecture as each builds on previous material. Students that miss class typically fall behind and perform poorly on exams. When attending lectures please arrive on time, be attentive, participate in discussions, take copious notes, and ask questions when needing clarification. Please silence cell phones during lectures and refrain from texting. I do NOT use blackboard for posting multimedia materials; lecture slides require explanation of the processes they highlight and that is what the lectures accomplish. Simply put, come to class.

COURSE EXAMS, MAKE-UP EXAMS AND GRADING: There will be five unit exams, each consisting of about 60-70 multiple-choice questions. The 5th exam is not comprehensive. For each exam, you will need a #2 pencil and a purple Scantron (NCS No. 16485). These exams are your ONLY opportunities to earn points. I do not have a drop grade policy nor do I offer extra credit. I expect you to take each exam at the regularly scheduled time. Make-up exams for students with reasonable (e.g., illness) and documented (e.g., note from doctor) excuses will be provided. Grades will be posted after each exam via email. Exam grades will be assigned according to the percentages provided below based on the high score from each exam.

A = 88-100% B = 76-87.9% C = 64-75.9% D = 52-63.9% F = 51.9% and below

- Grades assigned in this course reflect level of mastery of course material. High levels of student learning will require you to start working towards it today. See me or attend the SLS (see below) immediately if you are having problems.
- Any evidence of academic misconduct (e.g., cheating) will MINIMALLY result in an F grade assigned for the course. Further details concerning academic misconduct procedures can be found in the M-Book.

SPECIAL NEEDS: Any student requiring assistance should contact the Office of Student Disability Services at 915-7128. I will be happy to make reasonable accommodations. However, producing notification of need for accommodation the day of a test may not be honored.

STRATEGIC LEARNING SESSIONS: Emily Partridge (jepartri@olemiss.edu) and Rachel Ringnald (riringna@olemiss.edu) will serve as peer teaching assistants throughout the semester. If you need help in developing efficient and effective study techniques that promote mastery of course material, please take advantage of this opportunity. The times of these meetings are Mon, Tues & Wed from 1-2:00 in Peabody 208. Stephen White (swwhite1@olemiss.edu), my graduate assistant, is also available for help outside these sessions.

C O U R S E C A L E N D A R S P R I N G 2 0 1 0

DATE	TOPIC	TEXT READINGS
Jan 21	Historical Highlights and Brain Recording/Imaging	9-14,135-139,146-160
Jan 26	Glia, Neurons and Membrane Potentials	29-32,36-41
Jan 28	Action Potentials and Synaptic Transmission	42-66
Feb 2	Neurotransmitters	110-132
Feb 4	CNS/PNS Organization-Structure-Function	69-76,82-101
		<i>Pinel & Edward's Workbook: 3-48, 71-126</i>
Feb 9	EXAM 1: Lecture and text material to date	
Feb 11	Vision I: Anatomy and Transduction	170-186
Feb 16	Vision II: Coding and Color Vision	192-210
Feb 18	Audition I: Anatomy and Transduction	213-234
Feb 23	Audition II: Coding/Language	486-508
Feb 25	Somatosensation: Touch, Pain and Phantoms	237-249
		<i>Pinel & Edward's Workbook: 131-148, 207-211</i>
Mar 2	EXAM 2; lecture and text material since exam 1	
Mar 4	Motor Systems & Movement	272-293
Mar 9	Disorders of Movement	535-543
Mar 11	Dis. of Movement Cont./ Sexual Differentiation	330-353
Mar 15-19	No Classes: Spring Recess	
Mar 23	Sexual Differentiation	
		<i>Pinel & Edward's Workbook: 153-166, 171-182</i>
Mar 25	EXAM 3; lecture and text material since Exam 2	
Mar 30	Emotion	367-399
Apr 1	Emotion cont. & Memory systems	444-454
Apr 6	LTP and Neuroplasticity: Chronic Pain Revisited	
Apr 8	Amnesia and Alzheimer's Disease	543-548
		<i>Pinel & Edward's Workbook: 194-195</i>
Apr 13	EXAM 4; lecture and text material since Exam 3	
Apr 15	Reward Mechanisms/Addiction	461-464,614-639
Apr 20	Schizophrenia	555-571
Apr 22	Schizophrenia Cont.	
Apr 27	Affective Disorders	571-584
Apr 29	Affective Disorders Cont.	
		<i>Pinel & Edward's Workbook: 192-193</i>
May 6	EXAM 5 @ 8:00 am; lecture and text material since Exam 4	

THIS SCHEDULE IS SUBJECT TO CHANGE IN CASES OF EXTENUATING CIRCUMSTANCES