



Fall, 2011

PSY 314: BEHAVIORAL NEUROSCIENCE SYLLABUS

Instructor: Kristopher Ian Mathis, Ph.D.

Office: Sage Hall, Room 1129

Telephone: 805-437-8945

Email: kristopher.mathis@csuci.edu

Office Hours: Tuesday, 11:00 AM – 12:00 PM; 3:00 PM – 4:00 PM

Lecture: Tuesday, 12:00 PM – 2:50 PM; Bell Tower 2515

Lab: Tuesday, 4:00 PM – 5:50 PM, 6:00 PM – 7:50 PM; Bell Tower 1716

Website: <http://csuci.blackboard.com>

Textbook: Pinel, J.P.J. *Biopsychology* (8th Edition). Boston, MA: Allyn & Bacon. 2011.

Course Description:

The university catalog describes this course as covering "neuroanatomy, physiology, pharmacology, and their application to cognition, emotion, language, learning, motivation, perception, and memory." Our survey of behavioral neuroscience will address these topics and many others as we explore the biological substrates and neural correlates of human behavior. Behavioral neuroscience, as a field of investigation, exists at a remarkable interface between the social and natural sciences. As we review the current state of the field, your objective will be to learn the physiological and biological mechanisms by which humans perceive and respond to the world. In the accompanying laboratory sections, you will learn and apply the methods employed by behavioral neuroscientists to identify and characterize these mechanisms.

Evaluation and Grading:

This course is required for students who have chosen psychology as their major, and evaluation will be conducted using the CSUCI default letter grade system (A, B, C, D, and F). I will be using +/- grading to provide a more precise record of performance. Letter grades will be awarded based on students' performance on midterm and final written examinations and laboratory participation according to the following system:

The lowest midterm examination grade will be dropped. Performance on the three highest midterm examination grades will account for 75% of the final grade (25% each). Performance on the cumulative final examination will account for the remaining 25% of the final grade. An average of 90% or better across the midterm and final examinations will earn an A grade (i.e., A+, A, A-). An average of 80 - 89% will earn a B grade (i.e., B+, B, B-). An average of 70 - 79% will earn a C grade (i.e., C+, C, C-). An average of 60 - 69% will earn a D grade (i.e., D+, D, D-). An average of 59% or lower will earn a failing grade. This is an absolute scale, therefore students are not in competition with each other and are encouraged to study together. If at the end of the semester, this scale results in fewer A, B, or C grades than is typical for required courses in the Department of Psychology, then I will adjust the scale to match the Department's average distribution of these grades. This adjustment can not reduce any student's grade.

Laboratory participation is required; each unexcused absence from a scheduled laboratory session will result in a 5% deduction from the final grade. Five or more unexcused absences from scheduled laboratory sessions will result in compulsory failure of the course.

Make-up Examination Policy:

Requests to take a make-up examination must be submitted by phone, email, or in person prior to the scheduled date of the examination. Requests will be reviewed on an individual basis and will typically be granted only in circumstances involving documented family emergencies and personal health problems.



Fall, 2011

Course Schedule

Date (Lecture)	Chapter	Topic	Notes
Week 1: 08/30/11	--	Syllabus and Course Overview	
Week 2: 09/06/11	1 & 2	Introduction to Behavioral Neuroscience: From Genes to Personality	
Week 3: 09/13/11	3	Fundamental Neuroanatomy: Structure and Function	
Week 4: 09/20/11	--	Lecture and Laboratory cancelled due to power outage	
Week 5: 09/27/11	4	Thinking: Neural Communication: Synaptic Transmission	Midterm 1 (Ch. 1 – 3)
Week 6: 10/04/11	5	Studying: Methodology in Brain and Behavior Research	
Week 7: 10/11/11	6	Seeing: The Visual System and Sensation vs. Perception	
Week 8: 10/18/11	7	Hearing, Feeling, and Tasting: the Auditory, Somatic, and Chemical Senses	
Week 9: 10/25/11	8	Moving: The Sensorimotor System	Midterm 2 (Ch. 4 – 7)
Week 10: 11/08/11	9 & 10	Changing: Neural Development, Damage, and Adaptation	
Week 11: 11/15/11	10 & 11	Remembering: Learning and Storing Information in the Brain	
Week 12: 11/22/11	12 & 13	Doing (The Four Fs): Motivation and Action	Midterm 3 (Ch. 8 – 11)
Week 13: 11/29/11	14	Resting: Sleeping, Dreaming, and Keeping Time	
Week 14: 12/06/11	15	Altering: Artificial Chemical Stimulation of the Brain and the Brain's Defense	Midterm 4 (Ch. 12 – 15)
Week 15: 12/13/11	17 & 18	Review Section and Q & A, 2:00 – 4:00 PM Final Examination, 4:00 – 6:00 PM	Final Exam (Cumulative)

Academic Integrity

Academic integrity and professional ethics are sacrosanct to me and to our university. Please review the sections of the CSUCI 2010-2011 University Catalog pertaining to Academic Dishonesty (SP02-01, p. 60) and the Honor Code (SP04-38, p. 70). Do not hesitate to contact me should you have any questions or concerns, whatsoever. No question or concern is too minor.

University Catalog: http://www.csuci.edu/academics/catalog/2010-2011/Sec-7_Policies-and-Regulations.pdf