If the brain were so simple that we could understand it,
we would be so simple that we couldn't."
Lyle Watson

INTRODUCTION TO PHYSIOLOGICAL PSYCHOLOGY
PSYCHOLOGY 202A
TIME: 11:30 AM, Daily, (5 credits)
INSTRUCTOR: VIRGINIA BRIDWELL
OFFICE: D110
OFFICE HOUR: 12:30 – 1:20
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WINTER QUARTER 2008

REQUIRED TEXT: James W. Kalat; Biological Psychology, ninth edition, Thomson/Wadsworth, Publisher.

COURSE DESCRIPTION:

Psychology is the scientific study of behavior, thought and emotion. This course will introduce terminology, methodology, concepts and theories of the biological aspects of behavior. This course will examine the structures and functions of the brain, sensory systems, and endocrine system on a molecular, cellular and organ level as they are integrated to process information and perform behaviors.

COURSE OBJECTIVES:

Upon completion of this course, the successful student will:

1. Identify the components of the nervous system, endocrine system, and immune system and describe their functions.
2. Describe the chemical influences on behavior at the cellular level, the neural level and at the level of the organism.
3. Describe applications of the scientific method to the study of behavior and mental processes.
4. Distinguish between the various methods and technologies employed in studying the brain.
5. Demonstrate an appropriate use of terms and theories related to physiological psychology.
6. Identify the prominent theorists in the field of physiological psychology and discuss their contributions to the field.
7. Discuss the dynamic relationship between evolution, genetics and the environment as it influences physiology and behavior.
8. Be able to critically analyze claims that are made about behavior in a number of forums, from media to academia.

GENERAL EDUCATION OUTCOMES:

1. Critical Thinking, Creativity and Problem Solving. (2)
2. The Nature of Science (3)
3. Science and the Natural World (3)
4. Technology and Society (2)

GRADING AND EXAMS:
In conformity with BCC's grading policy the grades will be assigned as follows:

A	100 - 95	4.0
A-	94 - 90	3.7
B+	89 - 86	3.3
B	85 - 83	3.0
B-	82 - 80	2.7
C+	79 - 75	2.3
C	74 - 70	2.0
C-	69 - 60	1.7
D+	59 - 55	1.3
D	54 - 50	1.0
F	49 - BELOW	0.0

Your final grade will be based on a potential total of 600 points. They are broken down as follows:

EXAMS: (400 points)

There will be five exams, each worth 100 points. Your final grade will be calculated on the basis of your best four scores. Each exam will cover information from the text, lectures and class discussions. The test format will contain multiple choice and essay questions. You may expect your exams to be returned to you within three days (depending on the number of essay questions in the exam). You will need to bring a **scantron sheet and a number two pencil** to each exam. Paper for the essay questions will be provided. If after the final exam you wish to receive your results prior to receiving your transcript, you may bring a self-addressed, stamped envelope to the final exam and your exam will be mailed to you.

MAKE - UP EXAM POLICY:

There will be no make - up exams. No Exceptions. If you are unable to attend class on the day of an exam, you may arrange to take it before the scheduled date. Otherwise, since it is my policy to drop the lowest exam score, your missed exam will count as your lowest score.

DISABLED STUDENTS:

If you require accommodation based on a documented disability, have emergency medical information to share, or need special arrangements in case of emergency evacuation; please make an appointment with me as soon as possible.

RECIPROCAL PEER TUTORING ASSIGNMENT: (100 points)

Objective: This is a challenging course that requires systematic and rigorous study to master the concepts and theories presented. Research and anecdotal experience from tutors has shown that tutors achieve relatively greater understanding of academic information than their students. (Fantuzzo and Riggio, 1990)

Assignment description: To ensure your successful mastery of the course material, you will be randomly assigned to a study partner with whom you will be both student and tutor for the duration of the quarter. The course is divided into five units. Each unit culminates with an exam. You will be required to **meet** with your study partner for a **minimum** of two sessions per unit. In preparation for these meetings, each student must create the following:

1. An **original** multiple choice or short answer practice exam to be administered to the partner during the meeting. There should be a minimum of 20 questions per chapter.
2. A set of answers for each test item with a brief explanation of why the answer was the correct one.
3. Two **original** essay-type questions covering unit material with an outline of the answers.
4. Students will be prepared to discuss the questions and compare answers with their partner.
5. Two taped sessions of the discussions will be turned in by each study partner group over the course of the quarter. Due dates for the taped sessions are

Study group materials will be turned in on the day of the exam. **Late material will not be accepted. No exceptions. Study materials that plagiarize the study guide materials that accompany your text will not be accepted and will be treated with the consequences stipulated by the college and social sciences policies regarding plagiarism**. (See attached policies handout)

(Adapted from Reciprocal Peer Tutoring by Fantuzzo and Ron Riggio, Ph.D. (1990) Presented to the Terman Teaching Conference of Western Psychological Association Convention, 2006)

PATHWAY ASSIGNMENT: (100 points)

Objective: The purpose of this assignment is to provide another modality in which to encode course information into memory. The memorization of the various communication pathways in the brain is a challenge for the most capable student. This method accesses the visual and kinesthetic modalities of learning and can help in the process of distinguishing between pathways.

Assignment description:

You will create an **original** diagram of each of the following neurological communication pathways in the brain. Note that the due dates for the diagrams correspond to the chapter dates in which they are presented**. No diagram will be accepted after the date in which it is due.**

Pathway:	**Due Date:**
Retinal-Geniculate-Striate Pathway	2/1
Retinal-Tecto-Pulvinar Pathway	2/1
Auditory Pathway	2/11
Vestibular Pathway	2/11
Gustatory Pathway	2/11
Dorsal-column medial lemniscal system	2/11
Anterolateral system	2/11
Olfactory Pathway	2/11
Dorsolateral Corticospinal Tracts	2/15
Ventromedial Corticospinal Tracts	2/15

Your assignment is to:

1. Label each nucleus with the correct name and function.
2. Identify a mnemonic devise that will help you remember its name and function
3. Identify some way that this information is personally relevant to you, (i.e., how have you recently experienced this pathway?)

Each accurate diagram will be awarded 10 points.

CLASS POLICIES:

ATTENDANCE:
As adult students, you are expected to be able to manage your own time and priorities. Therefore, with the exception of days when demonstrations, exams and activities are scheduled, attendance is not taken. This is college. You are not expected to call and explain your absence. **However**, you **are** expected to obtain notes from other students to gain information regarding announcements or lectures that you have missed. Studies have shown that the students who attend class regularly do achieve better grades and comprehension. They are also the students who enrich the class with their questions, participation, and discussions. Consequently, I will reward attendance with extra credit points by taking attendance randomly throughout the quarter (usually on days when attendance is low). These points will be logged in my grade book and assessed when your grade appears to be on the borderline between grades and I need to justify rounding your grade up to the higher grade.

PUNCTUALITY:
Please be on time for class. Late arrivals result in loss of important information and distract students' opportunity to hear announcements. If circumstances prevent you from arriving on time, please take a seat closest to the door to reduce the number of students that you distract.

Once class has commenced, do not leave before the end of the hour. Students sometimes encounter circumstances in which they have to leave class before the end of the hour. **Make every effort to avoid leaving class before the end of the hour.** Once again, this creates a distraction for others that can be very disturbing when it results in loss of information or confusion. Arrange for such occurrences by speaking to me about it before class and **planning to sit next to the door and do not reenter the room once you have left**.

CLASS PARTICIPATION:
You are encouraged to participate in discussions of the theories and concepts presented in class. This has the effect of expanding your comprehension of the material and enriching the learning experience for yourself and your fellow students. Many of the theories may seem counter-intuitive and will provoke much reaction. You are encouraged to share your reactions with the class as they pertain to the material. **However**, side - comments directed to fellow students contribute to distractions that are disturbing to students and will not be tolerated. **Students who distract from the lecture/discussion will be asked to leave the class**.

CELL PHONES:
Cell phones are a convenience, not a right. They create a distraction for your fellow students. **Cell phones are to be turned off while in the classroom. Students who neglect to turn off their phones before class will be excused from class for the remainder of the hour if their phones ring during class time**.

Proposed Class Schedule

Week of:	Chapters:	Readings:
1/2	Chapter 1	Genetics of Behavior
	Chapter 2	Nerve Cells and Nerve Impulses
1/7		
	Chapter 3	Synapses
1/14	**EXAM I**	**CHAPTERS 1, 2, and 3**
1/14	Chapter 4	Anatomy of the Nervous System And Research Methods
1/22	Chapter 5	Development and Plasticity of the Brain
1/28	**EXAM II**	**CHAPTERS 4 AND 5**
1/28	Chapter 6	Vision
2/4	Chapter 7	The Other Sensory Systems
2/11	**EXAM III**	**CHAPTERS 6 and 7**
2/11	Chapter 8	Movement
2/19	Chapter **13**	The Biology of Learning and Memory
2/25	**EXAM IV**	**CHAPTERS 8 and 13**
2/25	Chapter 9	Wakefulness and Sleep
3/3	Chapter 10	Internal Regulation
3/10	Chapter 11	Reproductive Behaviors

Final Exam:

3/18 11:30 – 1:20 EXAM V CHAPTERS 9, 10, and 11

This schedule is an estimation of the time required to cover the material. It is subject to change. It is essential that you attend class daily to obtain announcements of changes in the schedule.