# PHYSIOLOGY AND COMPARATIVE PSYCHOLOGY

PSYC 4130, #73-113

Summer 2012, 11:45AM-12:45PM daily, Park Hall, Room 265

**Instructor:** Jennifer C. Wong **TA:** Brian Stone

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# Course Description

This class will focus on the biological foundations of human and non-human behavior, with an emphasis on underlying physiological mechanism, the development, evolution, and function of behavior. The class will focus on the anatomy and physiology of the nervous system, the sensory systems, and types of stimuli affecting these systems. Clinical and practical applications of the fundamental knowledge will also be explored with the utilization of scientific literature.

# **Prerequisites**

PSYC 2990 or PSYC 3990

## Course Objectives

- Understand the biological bases of the nervous system
- Understand neuroanatomy
- Understand the function of the autonomic, endocrine, and sensory systems
- Understand the neurobiological bases of fundamental behaviors like feeding, reproduction, circadian rhythms, and learning
- Be able to find and read scientific literature
- Be able to think critically and solve problems

#### Required Material(s)

Kalat, J.W. (2009). Biological psychology (10<sup>th</sup> edition). Belmont, CA: Wadsworth ISBN-10: 0495603007 ISBN-13: 9780495603009

You can use older editions if you wish; however, you will be responsible for any differences between editions.

# **Grading and Testing Policy**

There will be a combination of assignments and examinations involved in calculating the final grade. Reading Circles assignments (role sheets, reflection paper, participation grade) may be made up, but will only be accepted if there is a University accepted excused documentation. Any excused make-up Reading Circles assignments will be due by the next class or at the discretion of the instructor. There will be no make-up exams. Everyone must take the final comprehensive examination. With respect to the final exam, you may use this final exam to replace your lowest exam grade ONLY if you receive a 70 or above on the final. Furthermore, if you have an A in the course before the final, you may exempt the final. This

rule applies only if you have an A (not if you are simply satisfied with your grade). Upon receiving a returned assignment, there is a 24 hour policy in which you must wait before coming to talk to me about the grade to allow time for processing the grade.

# Grading Scale (Points)

Exams	
Exam 1	100
Exam 2	100
Exam 3	100
Exam 4	100
Reading Circles	
Reading Circles Role Sheets (4 total)	50

Final Cumulative Exam 100

Reading Circles Reflection

Reading Circles Participation

Total Points: 700

Letter Grade	Points	Corresponding percentages
A	651-700	93% and above
A-	630-650	90% - 92.999%
B+	609-629	87% - 89.999%
В	581-608	83% - 86.999%
B-	560-580	80% - 82.999%
C+	539-559	77% - 79.999%
С	511-538	73% - 76.999%
C-	490-510	70% - 72.999%
D	420-489	60% - 69.999%
F	below 420	Below 60%

100

50

# Attendance Policy

Attendance is highly recommended. When you do attend class, please be respectful of the instructor and other students. Do not text or play on the computer during class. If you need to take a phone call, please step outside of the classroom. It is your responsibility as a student to get notes and materials from a classmate upon missing class.

# **Open Door Policy**

I maintain an open door policy for students whenever possible. I would like to be available to students regarding any class concern, questions regarding graduate school, and any other academic concern. Please feel free to stop by my office whenever needed.

## Academic Honesty

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <a href="www.uga.edu/honesty">www.uga.edu/honesty</a>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

# Disability Statement

If you have a disability and require reasonable classroom accommodations, please see me after class. If you plan to request accommodations for a disability, please register with the Disability Resource Center at 114 Clark Howell Hall, Athens, GA 30602-3338 (706.542.8719).

#### Tentative Schedule

The syllabus is a general plan for this course. The instructor has the ability to change the syllabus to accommodate the class whenever needed. Deviations will be announced to the class when necessary.

Topic	Date	Reading (before class)	Assignment (due in class)
Introduction	6/8		
Functional	6/11	Ch. 2	
Neuroanatomy	Week 1		
Neuron	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Functional	6/12	Ch. 3.1 - 3.2	
Neuroanatomy	Drop ends		
Synapse	Brop ends		
Functional	6/13	Ch. 3.3, Ch. 15	
Neuroanatomy	Add ends		
Neurotransmitters &	rida chas		
Psychopharmacology			
Functional	6/14	Ch. 3.3, Ch. 15	
Neuroanatomy			
Neurotransmitters &			
Psychopharmacology			

Functional Neuroanatomy	6/15	Reading Circle #1 (Article posted on elc)	Reading Circle #1 Role Sheet
Reading Circles #1			
Functional Neuroanatomy	6/18	Ch. 4.1-4.2	
Intro to the brain	Week 2		
Exam 1 Review	6/19		
Exam 1	6/20		
Functional Neuroanatomy	6/21	Ch. 4.1-4.2	
Intro to the brain			
Learning and Memory	6/22	Ch. 13	
Learning and Memory	6/25	Reading Circles #2	Reading Circles #2 Role Sheet
Reading Circles #2	Week 3	(article posted on elc) Ch. 13	
Functional Neuroanatomy	6/26	Ch. 4.1-4.2, Ch. 15	
Intro to the brain			
Functional Neuroanatomy	6/27		
Frozen Addicts			
Functional Neuroanatomy	6/28		
Love in the brain			
Neural Plasticity	6/29	Ch. 5	
Exam 2 Review	7/2		
	Week 4		
Exam 2	7/3		

<b>Independence Day</b>	7/4		
No Class!			
Vision	7/5	Ch. 6	
	Halfway through the semester!		
Vision	7/6	Ch. 6	
Vision	7/9	Reading Circles #3	Reading Circles #3 Role Sheet
Reading Circles #3	Week 5	(article posted on elc)	
	Withdrawal Deadline	Ch. 6	
Audition	7/10	Ch. 7.1-7.2	
Gustation	7/11	Ch. 7.3	
Olfaction	7/12	Ch. 7.3	
Somatosensory and Pain	7/13	Ch. 7.2	
Exam 3 Review	7/16		
	Week 6		
Exam 3	7/17		
Biorhythms	7/18	Ch. 9, Ch. 14.3	
Circadian Rhythms			
Biorhythms	7/19	Ch. 9, Ch. 14.3	
Consciousness and Sleep			
Biorhythms	7/20	Ch. 9, Ch. 15	
Sleep			
Biorhythms	7/23	Reading Circles #4	Reading Circles #4 Role Sheet
Reading Circles #4	Week 7	(article posted on elc)	
Internal Regulation	7/24	Ch. 10	
Temperature, Thirst, and Hunger			
Internal Regulation Temperature, Thirst, and	7/25	Ch. 10	Reading Circles Reflection Paper and Participation Grades Due at the beginning of class!

Hunger			
Reproductive Behaviors	7/26	Ch. 11	
Reproductive Behaviors	7/27	Ch. 11	
Exam 4 Review	7/30		
	Week 8		
Exam 4	7/31		
Final Exam Review	8/1 Last day of class		*If you want to exempt the final exam, you must attend this class to find out your final grade.
	8/3 Final Cumulative Exam 12-3:00pm		

## Frequently Asked Questions

#### Exams

Exams will begin promptly at the start of class. No late admittance will be accepted on exam days after the first person has completed the exam. There will be <u>no make-up exams</u>. With respect to the final cumulative exam, you may use this final exam to replace your lowest exam grade ONLY if you receive a 70 or above on the final.

## Reading Circles

Reading Circles is an activity that will help you learn how to read articles in a different manner. Articles may come from peer-reviewed journals or they may be from magazines (i.e. Science Daily, Scientific American). You will be expected to complete the reading prior to Reading Circles in class, and you will be expected to fill out your role sheet prior to class as well. There will be a total of 6 Reading Circles throughout the semester. Reading Circles will consist of 6-7 group members, and you will be assigned a different role for each Reading Circles day. You will complete each role at least once. Your Reading Circles group will remain the same throughout the semester. Your group members will be the ones to grade you on your participation, however, the instructor will have the final word on the participation grade. I will be grading the handouts and the final Reading Circles Reflection Paper. This paper will be at least 2 pages long (double-spaced, Times New Roman, font size 12) and you will be required to answer several questions pertaining to Reading Circles. 5 points will be deducted for every day the reflection paper and participation grades are turned in late. The last day to turn the paper and participation grades in will be the day of the final.

# **Important Dates for Summer 2012**

Drop ends 6/12 Last day to add 6/13

4<sup>th</sup> of July Holiday 7/4 (No Class!)

Midterm 7/5 Withdrawal Deadline 7/9 Last day of classes 8/1

Final Cumulative Exam Friday 8/3 12:00pm – 3:00pm