

**Physiological Psychology**  
**PSYC 372 – 004**  
**Fall 2006**

**Instructor:** Jennifer Brielmaier

**Class time:** Wednesdays 7:20-10 PM

**Class location:** IN 136

**Office hours:** Wednesdays 6-7 PM & by appt.

**E-mail address:** jbrielma@gmu.edu  
(email is the best way to reach me)

**Office phone #:** 703-993-1358

**Office location:** DK 2027

**Required Text:** Kalat, J.W. (2007) Biological Psychology, 8<sup>th</sup> Edition,  
Wadsworth/Thomson Learning: Belmont, CA.  
<http://www.campusstores.com/gmu/index.asp>

**Optional** (for reference and additional material): Kandel, E.R., Schwartz, J.H. & Jessell, T.M. (2000). Principles of Neural Science, McGraw-Hill.

**Goals and course description:**

Physiological psychology is considered to be a sub-area of biopsychology (which some consider to be a sub-area of the larger field of neuroscience), which also includes psychophysiology, neuropsychology, psychopharmacology, comparative psychology and cognitive neuroscience. Regardless of the approach, all of these areas share the goal of understanding the biological component of human behavior. The goals for this course are to develop a foundation for the understanding of the central nervous system as well as explore the biological aspects of various psychological phenomena. Topics covered will include basic neuroanatomy, neural and synaptic transmission, neural mechanisms underlying normal and abnormal behavior and biological mechanisms of drug action.

**Things to Know:**

Please complete all reading assignments **prior** to our class meeting each week, as this will aid your understanding of the lecture material. It is strongly recommended that you attend class, since this material will be on quizzes & exams. If you must miss class, please go to a classmate first for notes. I will be glad to meet with you for any questions after you do this. I also welcome questions via email anytime.

**Assignments:**

- **Exams.** There will be a total of four exams (3 non-cumulative interim exams and 1 **cumulative final exam**) consisting of multiple choice, true/false and fill-in-the-blank questions. You may drop your lowest grade on any one of the **first 3 interim** exams. **The final cannot be dropped.** The two interim exams you choose to keep will then each count for 25% of your grade.
- **Quizzes.** There will be a total of three **unannounced** quizzes at the beginning of class covering material from the prior week's lecture/reading. These quizzes count for **extra credit** (up to 5 points per quiz) that will be added to the total of your final exam, and will be the same format as the exams. Because they count as extra credit, there will be no make-up quizzes allowed.
- **In-Class Assignments.** I will provide time each week to complete an assignment that is due at the end of class. Assignments will relate to the lecture/reading material and **address topics that will be on the exams.** Therefore, it is highly encouraged that you attend each class and complete the assignments. Bringing your textbook to class will help you complete them. You are allowed to drop two

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of these assignments; thus, there will be no make-ups. These assignments will account for 10% of your final grade.

- **News Summary.** You are required to submit a brief report (1-2 typed pages) on a **written** news item in the recent press (2006) related to neuroscience/physiological psychology. There are no requirements for where you find the information, but some suggestions include scientific articles (i.e. *Journal of Neuroscience*, *Developmental Psychology*), textbooks, websites, magazines and newspapers. In this assignment you will extract and summarize the most pertinent information from the article and research, with an emphasis on trying to relate the content of the article to course material. The original "source" article must be attached to the paper. Reports may be turned in at any time during the course **before** the last day of classes. They may also be submitted electronically as long as the original source article is also electronic and can be sent as an email attachment or a link. This summary will account for 10% of your final grade.

### Exam Make-Up Policy:

Unless the student has obtained my consent to postpone an exam or has written medical documentation for absence from an exam, **there will be no make-ups and it will be the exam you drop.** Permission to postpone an exam will only be given for very acute and important reasons, at my discretion.

### Tentative Schedule

Date	Topic	Chapter & Required Reading
August 30	Introduction Structure of the Vertebrate Nervous System	1: 1-10, 22-25 4: 81-95
September 6	Neuroanatomy (cont.) Cells of the Nervous System	4: 96-111 2: 29-38
September 13	Nerve Impulses Synapses	2: 39-47 3: 51-76
September 20	<i>EXAM 1</i>	
September 27	Sensory Systems	6: 152-162 173-179 7: 196-201 209-213 216-226
October 4	Development and Plasticity	5: 122-146 6: 184-190
October 11	<i>EXAM 2</i>	
October 18	<i>NO CLASS</i>	
October 25	Learning and Memory	13: 383-411
November 1	Cognitive Functions	14: 416-444
November 8	<i>EXAM 3</i>	
November 15	Sleeping and Waking Reproductive Behavior	9: 265-288 11: 325-337 345-348

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November 22	<i>NO CLASS</i>	
November 29	Emotional Behaviors	12: 353-380
December 6	Psychopathology	15: 451-480
December 13	<i>FINAL EXAM</i>	7:30 – 10:15 pm

**NOTE: You are responsible for all announcements and any syllabus modifications made in class each week whether you are present or not.**

**Grading:**

Interim Exams (2 x 25% each = 50%) + In-Class Assignments (10%) + News Summary (10%) + Final Exam (30%) = 100%

Grades will be assigned based on the following scale:

A+ 97% or above	C+ 77-79%
A 93-96%	C 73-76%
A- 90-92%	C- 70-72%
B+ 87-89%	D 60-69%
B 83-86%	F 59% & below
B- 80-82%	

Please note that PSYC 372 is a required course for psychology majors, and a grade of "C-" or better is required for graduation.

**Technology:**

Class will be held in an Electronic Classroom and lectures are in PowerPoint format. Lecture notes, grades, announcements, and some additional "fun" reading/visual material will be available on WebCT (Please know your user name & password and make sure your browser is compatible; see <http://www.webct.com/tuneup>). Please be sure to have an active GMU email account as well. I will not accept or respond to emails from non-GMU addresses.

**Special Needs:**

Every effort possible will be made to accommodate students with a disability or other special need. If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

**Add/drop deadline:**

Last day to add - Sept. 12<sup>th</sup>

Last day to drop - Sept. 29<sup>th</sup>

There is also an elective withdrawal option that will be from September 30 - October 27. I strongly suggest that you speak with your academic advisor before choosing this option.

**The GMU honor code will be strictly enforced.** Cheating will not be tolerated and will be reported to the University Honor Board &/or penalized.