



Psychology 261 Physiological Psychology Fall 2006



Class Time: Tuesdays & Thursdays 1pm-2:20pm

Location: MC 2066

Instructor: Dr. Myra Fernandes
Office Hours: Wed. 11am-noon

mafernan@watarts.uwaterloo.ca
Office: PAS 4054

Teaching Assistants:

Erin Skinner
Office Hours: Monday 11am-noon
Brandon Vasquez
Office Hours: Wednesday 10am-11am

eiskinne@watarts.uwaterloo.ca
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Office: PAS 4228

Required Course Text

Carlson, N. (2007). Physiology of Behaviour, 9th Edition, Boston, MA: Allyn & Bacon

Course Description

Physiological psychology examines how biology influences our behaviours. The goal of this course is to introduce you to the fundamental physiological processes underlying brain – behaviour relationships in humans. The course will cover cellular, neurochemical and neural network levels of analysis for human behaviour. Topics covered include: neuroanatomy, neurodevelopment, methods in neuroscience, sensory processing, motor control, vision, memory, emotion, and neurological disorders. Though we will only have a chance to touch on a few aspects of this vast research domain, the material will hopefully give you new insights into how behaviours are influenced by our physiology.

Because of the large number of students in the class, I will spend most of class time lecturing. However, I do encourage discussion and questions to clarify material. I think the class will be much better if you participate by asking, and answering, questions! It is also extremely important that you read the assigned text material as well as attend lectures! Though there will be overlap between text and lectures, there will be material in the text that will not be covered in lectures and likewise, there will be some material in the lectures that is not in the text. Regular attendance is strongly encouraged.

Overview of Evaluation:

Mid-term Test #1		30%
Mid-term Test #2		30%
Mid-term Test #3		24%
Quizzes	2 X 6% =	12%
Participation in Research Experiments (or Assignments)	4 X 1% =	4%

Details on each Evaluation

Mid-term Tests

Each test:

- is non-cumulative
- is 75 minutes (1 hour 15 min.) in length
- will be based on the material presented in the text and in lectures
- will be composed mostly of multiple choice, with some short answer questions
- will be written either in the regular classroom (MC 2066), or in rooms to be determined, to ensure adequate space for writing (information on test location will be posted on UWACE, and during lectures)

If you miss a test:

It is the student's responsibility to provide, **within 1 week of the missed test**, acceptable documentation to support a medical, compassionate, or religious claim for missing a test. Otherwise a grade of zero may be assigned for the missed test.

If you feel that you have a medical or personal problem that is interfering with your work, you should contact your Instructor and the Academic Counseling Office as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. In general, retroactive requests for grade revisions on medical or compassionate grounds will not be considered. For example, in the case of illness, the student must provide an official illness certificate on appropriate letterhead from their physician, which states that, due to medical reasons, it was impossible for the student to write the exam at the scheduled time. A note on a prescription pad is not an acceptable medical certificate.

Once Dr. Fernandes has received appropriate documentation for missing a test, a make-up test, covering that material, will be scheduled for a time that is mutually convenient for Dr. Fernandes, the TAs, and the student.

Quizzes

Each quiz:

- will consist of fill in the blanks and definitions taken directly from the **Course Animations of the text CD-ROM** (see below)
- is based on material covered in the **Course Animations** of the CD-ROM
- is 15 minutes in length
- will take place in the regular classroom, MC 2066

If you miss a quiz:

It is the student's responsibility to provide, in a timely manner, acceptable documentation to support a medical, compassionate, or religious claim for missing a quiz. Otherwise a grade of zero may be assigned for the missed quiz.

NO MAKE-UP QUIZZES will be given. But, if you provide appropriate documentation for missing a quiz, **within 1 week of the missed quiz**, a make-up assignment will be given.

Participation in Research Experiments or Assignment (maximum = 4%)

Participation:

In order to familiarize you with different types of research in psychology, you will have the opportunity to participate in actual experiments being conducted at the University of Waterloo. **A representative from the *Psychology Research Experiences Group* will visit the class in the 1st week of classes, and will inform you of the procedure for signing up for research experiments.** You will be given a grade of 1% for each 1 hour of participation in an experiment, up to a maximum of 4%. **The last day to participate is November 24th.**

Assignments:

If you do not wish to participate in experiments, or cannot find an available experiment, you can complete Assignments instead. Each Assignment is to write a 1 page (single-spaced) summary, in your own words, of a research article on any topic in Physiological Psychology, from an academic Journal. You will be given a grade of 1% for each Assignment, up to a maximum of 4%. All written assignments are **due no later than November 24th**. Please **email all assignments** to your TA, Erin Skinner, (eiskinne@watarts.uwaterloo.ca).

NOTE: you can combine Participation and Assignments, or choose to do one or the other; You will be given a MAXIMUM of 4% for this section of the Evaluation.

Course Animations and Study Guide

Your textbook comes with a CD-ROM which contains terrific animations that illustrate concepts discussed in the textbook and in lectures. A Study Guide is also contained on the CD, along with Self-Tests. The CD can be loaded onto your own computer (IBM or Macintosh) for personal use.

This CD-ROM is also available to you in PAS 1237. To access the contents of the CD, log on to any computer in PAS 1237, and type in your NEXUS account user id and password. Accounts are available to all students. Just click on 'Create Account' at one of these computers, if you do not already have an account. Once logged on, go to Start> Program Files> Arts> Psychology> Psych 261, and run the .exe program. **If you have trouble logging on, please see or email your TA, Brandon Vasquez (bvasquez@watarts.uwaterloo.ca), for help.**

Course Web page / Using UWACE:

What is UW-ACE?

It is a web-based course management system that enables instructors to interact easily and efficiently with their students. **Here, I will post lecture notes, grades, and the course syllabus. Course announcements, and answers to Frequently Asked Questions will also be posted on UWACE.**

How do I log into UW-ACE?

Type <http://www.uwace.uwaterloo.ca> and log on using your Quest/UWdir userid and password.

What should I do if I can't get logged into UW-ACE?

If you know that you should have access to a course using UW-ACE, but are having trouble logging in, please confirm that your QUEST/UWdir userid and password are correct. Please note that UW-ACE is case sensitive, so you must type your password with the appropriate upper and lower case letters. If you confirm that your userid and password are correct and **still cannot log in, please check with your Teaching Assistants to ensure that you are on the class roster.** If you continue to encounter difficulties, please e-mail uwacehelp@ist.uwaterloo.ca stating your name, Uwuserid, student ID number and the course to which you wish access.

Note for students with disabilities:

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Note on avoidance of academic offences:

All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offence, to avoid committing academic offences, and to take responsibility for their academic actions. When the commission of an offence is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offences and types of penalties, students are directed to consult the summary of Policy #71 which is supplied in the Undergraduate Calendar (section 1; on the Web at http://www.adm.uwaterloo.ca/infoucal/UW/policy_71.html). If you need help in learning how to avoid offences such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your TA or course instructor for guidance. Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean. Please also note the following link to the Arts Faculty Web page, "How to Avoid Plagiarism and Other Written Offences: A Guide for Students and Instructors" (<http://watarts.uwaterloo.ca/~sager/plagiarism.html>)

About Your Instructor

In my research I aim to understand the processes involved in higher cognitive functions such as memory, attention and language. I use a combination of behavioural tests and neuro-imaging to identify the brain basis of these functions. In addition I study how the normal aging process affects cognition, particularly one's ability to carry out memory tasks concurrently with other tasks (dual-tasking). This work is used to test and refine current models of how memory encoding and retrieval operate.

Who can I see if I have questions about the course material?

See your Teaching Assistants if you have questions about material covered in the textbook. See Dr. Fernandes for questions about material covered in the lectures.

The following pages contain the Tentative Schedule for classes:

Topic	Text Reading	Date
Introduction / History Evolution / Structure of Cells	Ch. 1	Tuesday Sept. 12 th Thurs. Sept. 14 th
Neurons Communication between neurons	Ch. 2 Ch. 2	Tuesday Sept 19 th Thurs. Sept. 21 st
Neuroanatomical terms Brain structures	Ch. 3 Quiz #1 (and lecture to follow)	Tuesday Sept 26 th Thurs. Sept 28th
Neural Development Methods in Research	Ch. 5	Tuesday Oct 3 rd Thurs. Oct 5 th
Mid-term test #1 Psychopharmacology	Mid-term test #1 (rooms TBA) Ch. 4	Tuesday Oct 10th Thurs. Oct 12 th
Drugs / Vision Vision	Ch. 6 Ch. 6	Tuesday Oct. 17 th Thurs. Oct. 19 th
Disorders of Vision Audition / Body Senses	Guest lecture Quiz #2 (lecture to follow) Ch. 7	Tuesday Oct 24 th Thurs. Oct 26th

Topic	Text Reading	Date
Sleep / Reproductive Behaviour	Ch. 9 and 10	Tuesday Oct 31 st
Emotion	Ch. 11	Thurs. Nov 2 nd
Mid-term test # 2	Mid-term test # 2 (rooms TBA)	Tuesday Nov 7th
Flashbulb memories / Memory loss		Thurs Nov 9 th
LTP / Conditioning / Learning	Ch. 13	Tuesday Nov 14 th
Executive Control / Attention	guest lecture	Thurs Nov 16 th
Memory and Aging		Tuesday Nov 21 st
Hemispheric Asymmetries / Human Communication	Ch. 14	Thurs Nov 23 rd
Neurological Disorders	Ch. 15	Tuesday Nov 28 th
Schizophrenia and Affective Disorders / Review	Ch. 16	Thurs Nov 30 th
Mid-term test # 3	Mid-term test # 3 (rooms TBA)	Tuesday Dec 5th

*Note that this is a tentative lecture schedule and is subject to change. Sometimes we are able to move a bit faster than what is scheduled, and other times we move a bit slower than projected. As such, I cannot guarantee that these topics will be covered on exactly these days.

**Note that the scheduled dates for tests and quizzes will not change.