

Psychology 261, Winter 2013

Physiological Psychology

Time: Mon/Wed/Fri 9:30AM – 10:20AM

Instructor: Roxane Itier

Phone: (519) 888-4567 ext. 32629

Place: RCH 101

Office: PAS 4023

E-mail: ritier@uwaterloo.ca

Office hours: Fridays 10.30-11.30am

Required Text:

Carlson, N.R. Physiology of Behaviour, 11th Edition, Pearson

Note: This is a customised text made available in e-book or print. It does not include all chapters of the Carlson text but instead has only those chapters we will cover. This was intended to lower the price of the text and the e-book version was intended as an environmental measure.

Teaching Assistants:

<u>Name</u>	<u>e-mail</u>	<u>Office</u>	<u>Office Hours</u>
<i>Bryan Cort</i>	<i>brcort@uwaterloo.ca</i>	<i>PAS 2261</i>	<i>Tues 3–4pm</i>
<i>Pierre Boucher</i>	<i>p2bouche@uwaterloo.ca</i>	<i>PAS 2237</i>	<i>Thurs 1-2pm</i>

Course Description:

The goal of this course is to introduce you to the scientific study of the brain and how it is involved in cognition and behavior. Throughout the course we will discuss a variety of methods used for studying the relation between the brain, cognition and behavior. These will include neuroimaging, brain stimulation, the use of animal models and various biochemical methods. Topics that will be covered include neural function, neuroanatomy, psychopharmacology, the senses (e.g., vision), memory, emotion, sleep and mental disorders (e.g., Autism Spectrum Disorders). The studies discussed will include both classic work, as well as current cutting-edge research.

Because of the size of the class, I will spend most of class time lecturing. However, I encourage questions and comments and I am sure that interesting discussions will spontaneously emerge during the class. I would like to highlight that it is important that you attend lectures and study the textbook. Although there will be some overlap between lectures and text, there will be material that does not overlap. You are responsible for all of the material covered in class and in the assigned readings.

Evaluation:

Four (4) Midterms	(24% each)	96%
Participation in Experiments	(1% per credit)	4%
Online quizzes	Bonus marks	5%
Final optional Exam		

Tests: The purpose of the four tests is to assess your understanding of the material in the course. **The tests will not be cumulative.** Each test will be 50 minutes in length and will be based on the material presented in the text and in lectures. Each test will contain multiple choice, fill-in-the-blank, true/false and short answer questions. Tests will be written in the regular classroom (detailed information will be posted on D2L).

Weighting of midterm tests: Each midterm is worth 24%, for a total of 96%. **There will be NO make-up exams.** There will also be an **optional, comprehensive final exam** covering the entire course. This exam will consist of both multiple choice and essay questions. If you choose to take the final exam, your score on that exam will replace your worst midterm performance. You can also take the final exam to replace a midterm that you missed during the semester (otherwise you will get a 0 for that midterm). If you missed one midterm, the final will be worth 24% of your final grade and replaces that midterm; if you missed 2 midterms, the final will be worth 48%; if you miss 3 midterms the final will be 72% and if you missed all four midterms it will be 96%. **It cannot hurt you to take the final.** If you do worse on the final than your worst test then you will simply get the grade you would have gotten with the midterm.

Obviously, you cannot miss a midterm without a good reason and medical proof.

Participation in Experiments: Component credits will be worth **4% of your final mark.** You can choose any type of experiment (a combination of lab and online studies) or an article review instead (1% per article), or a combination of both. **See attached guidelines for participation in psychology research for more details.**

Online quizzes: You will have the possibility to get **up to 5% of your grade in bonus marks.** These online quizzes will be offered to you on MyPsychLab, the online component of your Pearson textbook. They will consist of questions regarding the first 10 chapters of your book. For each chapter you can get 0.5%. In order to obtain the 0.5%, you will need to get at least 80% of the questions correct for that chapter. You can take the quizzes on any chapter at any time until April 8th 2013. Details on how to access MyPsychLab will be posted on D2Learn. Someone from Pearson will also come to class to explain more about the process.

Lecture Topics:**Topic**

Introduction/ History
Structure and Function of Cells of the Nervous System
Structure of the Nervous System
Psychopharmacology
Methods and Strategies of Research

Book chapters

Chapter 1
Chapter 2
Chapter 3
Chapters 4
Chapter 5

Vision	Chapter 6
Audition, the Body Senses and the Chemical Senses	Chapter 7
Control of Movement	Chapter 8
Sleep and Biological Rhythms	Chapter 9
Emotions	Chapter 10
Learning and Memory	Chapter 11
Neurological Disorders	
Anxiety, Autistic, Attention-deficit/hyperactivity, stress disorders	

IMPORTANT DATES

- Midterm 1 - Friday January 25th**
- Midterm 2 - Friday February 15th**
- Midterm 3 - Friday March 15th**
- Midterm 4 - Monday April 8th**

Reading week: February 18th - 22nd

****Please note that the details of this schedule might change depending on class interest and possible class interruption due to unexpected events. I will announce any changes in class AND on UW D2L so make sure you are regularly attending class and checking UW D2L**

E-Mail Communication:

If you would like to contact either the course instructor or the teaching assistants, please use the e-mail addresses provided on the syllabus. Students are responsible for all e-mail that is sent to their official UW e-mail address. Check your e-mail regularly for important and time sensitive messages.

UW D2L:

I will be using UW D2L to **post lecture notes, grades, and the course syllabus. Course announcements, and answers to frequently asked questions will also be posted on UW D2L.** Make sure you check your UW D2L account regularly to stay on top of the material in the course and any announcements.

Academic Integrity:

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, <http://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71>.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, <http://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70>. In addition, consult <http://arts.uwaterloo.ca/student-grievances-faculty-arts-processes> for the Faculty of Arts’ grievance processes.

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals, <http://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-72>.

Academic Integrity website (Arts):

http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html

Academic Integrity Office (uWaterloo): <http://uwaterloo.ca/academic-integrity/> Page 3 of 8

Accommodation for students with disabilities

Note for students with disabilities: The AccessAbility Services (AS) Office, 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 AS Office at the beginning of each academic

Research Experience Marks Information and Guidelines

Experiential learning is considered an integral part of the undergraduate program in Psychology. Research participation is one example of this, article review is another. A number of undergraduate courses have been expanded to include opportunities for Psychology students to earn grades while gaining research experience.

Since experiential learning is highly valued in the Department of Psychology, students may earn up to 4% of their final mark in this course through research experience (i.e., course work will make up 96% of the final mark and research experience will make up the other 4% for a maximum grade of 100%). **However there are some restrictions on the types of studies that are eligible for credit in this course. Be sure to review the guidelines referred to later in this document.**

The two options for earning research experience grades (participation in research and article review) are described below. Students may complete any combination of these options to earn research experience grades.

Option 1: Participation in Psychology Research

Research participation is coordinated by the Research Experiences Group (REG). Psychology students may volunteer as research participants in lab and/or online (web-based) studies conducted by students and faculty in the Department of Psychology. Participation enables students to learn first-hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience. Please be assured that all Psychology studies have undergone prior ethics review and clearance through the Office of Research Ethics.

Educational focus of participation in research

To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study detailing the following elements:

- Purpose or objectives of the study
- Dependent and independent variables
- Expected results
- References for at least two related research articles
- Provisions to ensure confidentiality of data
- Contact information of the researcher should the student have further questions about the study
- Contact information for the Director of the Office of Research Ethics should the student wish to learn more about the general ethical issues surrounding research with human participants, or specific questions or concerns about the study in which s/he participated.

Participation in LAB studies is worth 0.5 participation credits (grade percentage points) for each 30-minutes of participation. Participation in ONLINE studies is worth .25 credits for each 15-minutes of participation. Researchers will record student's participation and will advise the course instructor of the total credits earned by each student at the end of the term.

How to participate?

Study scheduling, participation and grade assignment is managed using the SONA online system. All students enrolled in this course have been set up with a SONA account. You must get started early in the term.

[INSTRUCTIONS/DATES/DEADLINES: How to log in to Sona and sign up for studies](#)

**** Please do not ask the Course Instructor or REG Coordinator for information unless you have first thoroughly read the information provided on this website.****

More information about the REG program in general is available at:

[REG Participants' Homepage](#)

Option 2: Article Review as an alternative to participation in research

Students are not required to participate in research, and not all students wish to do so. As an alternative, students may opt to gain research experience by writing short reviews (1½ to 2 pages) of research articles relevant to the course. The course instructor will specify a suitable source of articles for this course (i.e., scientific journals, newspapers, magazines, other printed media). *You must contact your TA to get approval for the article you have chosen before writing the review. Each review article counts as one percentage point.* To receive credit, you must follow specific guidelines. The article review must:

- **Be submitted before the [last day of lectures](#). Late submissions will NOT be accepted under ANY circumstances.**
- Be typed
- Fully identify the title, author(s), source and date of the article. A copy of the article must be attached.
- Identify the psychological concepts in the article and indicate the pages in the textbook that are applicable. Critically evaluate the application or treatment of those concepts in the article. If inappropriate or incorrect, identify the error and its implications for the validity of the article. You may find, for example, misleading headings, faulty research procedures, alternative explanations that are ignored, failures to distinguish factual findings from opinions, faulty statements of cause-effect relations, errors in reasoning, etc. Provide examples whenever possible.
- Clearly evaluate the application or treatment of those concepts in the article.
- Keep a copy of your review in the unlikely event we misplace the original.