



PSYCH 261
Physiological Psychology
Fall 2009

Class Time: Tuesdays & Thursdays 1pm-2:20pm **Location:** B1 271

Instructor: Dr. Erin Skinner
Office hours: Tuesday 11am-12pm

e-mail: eiskinne@uwaterloo.ca
Office: PAS 3028

Teaching Assistants:

Jason Locklin
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Office Hours: Thursday 11am-12pm

Candice Jensen
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Office: PAS 2248
Office Hours: Monday 11am-12pm

Required 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: neural communication, neuroanatomy, neurodevelopment, methods in neuroscience, sensory processing, 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. The class will be a more enjoyable experience if you participate by asking, and answering, questions! It is also 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	October 13 th	30%
Mid-term Test #2	November 10 th	30%
Mid-term Test #3	December 3 rd	24%
Quizzes	October 1 st & October 27 th	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 (B1 271), or in rooms to be determined, to ensure adequate space for writing (information on test location will be posted on UWACE, and provided 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. Students who are requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:

- seek medical treatment as soon as possible and obtain a completed UW Verification of Illness
Form: http://www.healthservices.uwaterloo.ca/Health_Services/verification.html
- submit that form to the instructor within 48 hours.
- (preferably) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.

In the case of a missed final exam, the instructor and student will negotiate an extension for the final exam which will typically be written as soon as possible, but no later than the next offering of the course.

In the case of a missed assignment deadline or midterm test, the instructor will either

- a) waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
- b) provide an extension.

In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

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. Skinner has received appropriate documentation for missing your test marks will be re-weighted or a make-up test, covering that material, will be scheduled for a time that is mutually convenient for Dr. Skinner, 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 15 minutes in length
- will take place in the regular classroom, B1 271

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**, your marks will be re-weighted or a make-up assignment will be given.

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

Purpose: Experiential learning is considered an integral part of the undergraduate program in Psychology. Participation in research is one example of this. A number of undergraduate courses have been expanded to include opportunities for Psychology students to volunteer as research participants enabling them to learn first-hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience.

Since experiential learning is highly valued in the Department of Psychology, you may earn up to 4% of your final mark in this course through research experience (i.e., your course work will make up 96% of your final mark and research experience will make up the other 4% for a maximum grade of 100%).

This can be done in two ways. First, you may participate in studies conducted by students and faculty in the Department of Psychology. Participation is worth 0.5 participation credits (percentage points) for each half-hour of participation. Researchers will record student's participation and the REG Coordinator will advise the course instructor of the total credits earned by each student at the end of the term. Second, if you do not wish to participate in research, you may choose an alternative approach to

earning the same number of credits; this is explained below in “Alternative to participating in research.”

Please note 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.

How to sign up for studies:

Once you are registered in this course, you will get an account on Sona (our web-based Study Sign-Up system) at <http://uwaterloo.sona-systems.com> and you will receive an email with your UserID and Password. IF YOU DO NOT RECEIVE this email, please report this to regadmin@uwaterloo.ca immediately. .

1. Log On to Sona: User ID is your Quest ID (eg. j2smith)
Password is your Student ID (eg 2001234)
2. Human Subjects/Privacy Policy: Please Read/Acknowledge
3. Prescreen Questionnaire: Please take 10 minutes to provide this demographics information. There is no credit for this and you may decline if you wish however completing it will increase your eligibility for studies.
4. Sign-up for Online Surveys and/or Lab studies:
 - a. Go to “Studies” page to view the list of available studies.
 - b. Click on the Titles of studies that are eligible for this course.
 - c. Read the Study Information page.
 - d. For Online studies: Click on “View Timeslots” and/or “Participate”.
 - e. For Lab studies: Click on “View Timeslots” to set up lab appointments.
5. Feedback and Credits: Upon completion of the study you will receive feedback about the study hypothesis, design and predictions. Within 48 hours you will be

granted the credit. Credits will be converted to grades and added to your final grade at the end of the term.

Mass Testing Survey (for 1.0 participation credit):

Researchers often select participants based on their responses to the measures in this survey. Completing it increases your eligibility for other studies. Note that you can only do this survey if you have completed the Prescreen questionnaire. Doing both Prescreen Questionnaire and Mass Testing Survey helps you (by providing more qualifying studies) and it helps researchers (by identifying more qualified participants). The Mass Testing Survey will be available until Tuesday October 20 at which time it will go offline, so please try to complete it before that date.

Study Restrictions and Important Dates:

- i. The first day to start participating in studies is Tuesday September 14.
- ii. The study must be eligible for a credit in this course (as noted in the Eligibility Requirements column on your Studies page).
- iii. **Only 2 of your credits for this course** can be for **Online** studies.
- iv. You should try to spread your participation out over the term i.e., if you wait until late in the term there may not be enough studies available for you.
- v. The last day to participate for **credit** is Friday December 4.
- vi. The last day to participate for **remuneration/pay** is Tuesday December 22.

Denial of access to studies: Completing studies that you have signed up for!

It is very important that you complete the studies that you have signed up for. For Lab studies this means showing up for the scheduled appointment. For Online studies this means completing the survey before the deadline that is posted in the timeslot. Please note that a study sign-up is a firm commitment to the researcher running the study so if you cannot keep the lab appointment or complete the survey before the deadline, please cancel the Sign-Up or contact the researcher in advance. Failure to attend 3 (THREE) Lab and/or Online studies that you have signed up for without providing adequate prior notice to the researcher may result in denial of access to further studies. Details are provided on the FAQ page on your Sona account.

For information, instructions, help with login problems etc. please contact:

REG website: <http://www.arts.uwaterloo.ca/~regadmin/regparticipant>

REG Coordinator: regadmin@uwaterloo.ca

Alternative to participating in research

Students are not required to participate in research, and not all students wish to do so. As an alternative to participation in research, students may submit short reviews (1½ to 2 pages) of journal articles relevant to the course material. Each review article counts as one percentage point. To receive credit, you must follow specific guidelines. The article review must:

- **Be submitted before November 30. 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. 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.

Students may complete any combination of a) participation in research or b) article review up to a total of 4 credits (i.e., 4% grade).

Please **email all assignments** to your TA, Jason: jalockli@uwaterloo.ca.

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, Candice,** cjensen@uwaterloo.ca, for help.

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

If you have any problems with lecture or text material, see your Teaching Assistants or Dr. Skinner. You can reach them through email or by visiting them during office hours. **Please label all emails with PSYCH 261 in the subject heading.**

Course Website: All lecture slides are downloadable in PPT format on UW-ACE.

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. If you confirm that your userid and password are correct and **still cannot log in, please check with your Teaching Assistant Jason, jalockli@uwaterloo.ca, 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.

It is your responsibility to check e-mail regularly for important and time sensitive messages. You should use your UW account for all e-mail correspondence to UW personnel for reasons such as identification, reliability, and security. Note that higher priority may be given to e-mail received from UW accounts versus other accounts such as hotmail, yahoo, etc. See "Official Student Email Address" for further details: <http://www.adm.uwaterloo.ca/infocist/emailuse.html>

The Official Version of the Course Outline

If there is a discrepancy between the hard copy outline (*i.e., if students were provided with a hard copy at the first class*) and the outline posted on UW-ACE, the outline on UW-ACE will be deemed the official version. Outlines on UW-ACE may change as instructors develop a course, but they become final as of the first class meeting for the term.

Academic Integrity, Academic Offences, Grievance, and Appeals

To protect course integrity, as well as to provide appropriate guidance to students, course outlines in the Faculty of Arts incorporate the following note on avoidance of academic offenses:

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

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://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (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://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

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://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

For further advice from the Faculty of Arts on the avoidance of academic offenses, see the following website:

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

Concerns about the Course or Instructor (Informal Stage)

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Dr. Colin Ellard) is available for consultation and to mediate a resolution between the student and instructor. Dr. Ellard's contact information is as follows:

Email: cellard@uwaterloo.ca
Ph 519-888- 4567 ext 36852

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. See Policy 70 and 71 below for further details.

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.

Course Schedule

Date	Topic Tuesday	Topic Thursday	Readings
September 15 & 17	Introduction/History	Evolution/Structure of Cells	Chapter 1
September 22 & 24	Neurons	Neurons	Chapter 2
September 29 & October 1	Neuroanatomical terms	Quiz #1 Brain structures/ Neural development	Chapter 3
October 6 & 8	Methods in Research	Methods/Research Ethics	Chapter 5
October 13 & 15	Mid-Term Test #1	Psychopharmacology	Chapter 4
October 20 & 22	Drugs	Vision	Chapter 6
October 27 & 29	Quiz #2 Disorders of Vision	Audition/Body Senses	Chapter 7
November 3 & 5	Control of Movement	Sleep	Chapter 8 (268-288) Chapter 9 (291-295, 301-306 & 319-326)
November 10 & 12	Mid-Term Test #2	Emotion	Chapter 11 (363-368 & 380-393)
November 17 & 19	Conditioning/Learning	Memory	Chapter 13 (431-445 & 459-477)
November 24 & 26	Aging/Dementias	Human Communication	Chapter 15 (531-546) Chapter 14
December 1 & 3	Psychological Disorders	Mid-term Test #3	Chapter 16 (551-557 & 568-572)