

Psych 396 Winter, 2014

Tuesday and Thursday, 1030-1220 AM, PAS 4032

Instructor and T.A. Information

Instructor: Colin Ellard

Office: PAS 4034

Office Phone: 519-888-4567 ext 36852

Office Hours: Fridays 1230-2 pm or by arrangement

Email: cellard@uwaterloo.ca

The best way to reach me is by email. You can normally expect a response from me within 24 hours. I will hold regular office hours on Mondays but you can reach me at other times and I will do my best to set an appointment for either a face to face meeting or a phone call with you at a time that works for both of us.

T.A.	Alex Filipowicz
Email	alsfilipowicz@uwaterloo.ca
Office	PAS 2245
Office Hours	TBA

Course Description

The main objective of the course is to deepen your understanding of neuroanatomy and brain function using a variety of approaches ranging from lecture and seminar presentations to experimentation and anatomical dissection.

Course Goals and Learning Outcomes

Upon completion of this course, students should be able to:

- A. Describe the basic elements of the mammalian brain
 - Describe and locate structures on a real brain
 - Describe many of the major pathways connecting brain areas
- B. Read critically and comment on primary research papers in neuroscience
 - Conduct literature reviews, identify key papers in a restricted area of neuroscience
 - Read primary research papers and comment critically on their content
- C. Write a full APA style journal article based on an experiment in behavioural neuroscience
 - Know how to conduct a simple study using provided tools
 - Know how to describe the findings of such a study in written format
- D. Work with a group to prepare and deliver a seminar presentation on a topic in neuroscience
 - Plan a group oral presentation in collaboration with team members and the t.a.
 - Deliver an oral presentation as part of a group, working with other members to provide a comprehensive description of an area of behavioural neuroscience (to be selected in collaboration with the instructor)

Required Texts

- -Vanderwolf, C. H. & Cooley, R. K. The sheep brain: A photographic series.

- -Nolte, J. The human brain: An introduction to its functional anatomy. Most recent edition preferred but other recent editions might work.
- -Original journal articles as required to complete assignments.

Readings Available on LEARN

- Course notes associated with each module
- Occasional enrichment articles (not required reading)

Course Requirements and Assessment

Assessment	Date of Evaluation (if known)	Weighting
Midterm exam	February 6	25
Neuroanatomy Quiz	March 11	10
Somatosensory mapping assignment	February 24	15
Presentation	various	20
LEARN quizzes	various	10
Spatial updating paper	April 3	20
Total		100%

Notes on Assessments

Midterm test and anatomy quiz These tests include a practical (“bell-ringer”) component and a written exam. A bell-ringer requires you to identify different locations on a physical/tissue specimen and so is geared towards assessing your understanding of the layout of the brain. The written exam will test both your identification skills and your understanding of the function of different parts of the brain and will be based on both lecture content and assigned readings. More details on both will be provided prior to their dates.

Written assignments. The somatosensory mapping experiment will be conducted in class on January 28. This assignment will consist of written answers to questions. The purpose of this assignment is both to deepen your understanding of sensory systems and to give you some practice in writing experimental papers. This first paper will be due on February 24 (this is much longer than you need following completion of the lab, but I don’t want it to interfere with the midterm on Feb 6). The second paper on spatial updating will be a full experimental write-up (cover page, abstract, method, results, discussion, and references) adhering to APA format. It is due on the last day of term.

Seminar presentation: Students will work in groups of about 4 to put together seminar presentations on topics assigned by the instructor. For each topic, I will give you some guidance and some starting points, but it will be largely up to members of the group to decide how to organize their presentation and what content to include.

Quizzes (LEARN). The quizzes are meant to guide your neuroanatomy readings early in the course and help you better understand the research process later in the course.

Course Outline

You'll notice that there is a fair bit of inevitable moving from classroom to lab and back again as we progress through the course. You should also take careful note of the dates of tests and deadlines for assignments. Even though the presentations take place fairly late in the term, you will also have a major paper to complete for last day of term, so you'd be wise to begin preparation of your presentation earlier rather than later.

Week	Date	Topic	Location
1	January 7	Welcome to the class	PAS 4032
1	January 9	Cellular neuroanatomy	PAS 4032
2	January 14	Introduction to gross anatomy	PAS 4032
2	January 16	Sheep brain dissection 1	lab
3	January 21	Sensory systems	PAS 4032
3	January 23	Sheep brain dissection 2	lab
4	January 28	In class experiment – measuring somatosensory acuity	lab
4	January 30	How to write a lab report	PAS 4032
5	February 4	Review session	lab
5	February 6	midterm	lab
6	February 11	Motor systems	PAS 4032
6	February 25	Sheep Brain dissection 3	lab
7	February 27	Sheep brain dissection 4	lab
7	March 4	Spatial updating	lab
8	March 6	Spatial updating	lab
8	March 11	quiz	lab
9	March 13	Debrief on spatial updating	lab
9	March 18	Presentations 1	PAS 4032
10	March 20	Presentations 2	PAS 4032
10	March 25	Presentations 3	PAS 4032
11	March 27	Presentations 4	PAS 4032
11	April 1	Presentations 5	PAS 4032
12	April 3	Presentations 6	PAS 4032

Late Work

Information on Plagiarism Detection

I have chosen not to use plagiarism detection software in this course. You should know, however, that both the teaching assistants and I have an expert eye for cheating developed over many years of experience. Any suspected violations of the University's integrity policy will be treated seriously and reported to the appropriate authorities. As per the note on integrity below, it is the student's responsibility to understand what plagiarism is and to avoid committing it.

Electronic Device Policy

You are welcome to use notebook computers or smartphones in my classroom for note-taking, and even the occasional Google search of something related to discussion would not be inappropriate. I would appreciate it if all chimes, beeps, tweets and ringtones (especially those which sample music I don't like) be muted during class. Also, surfing of unrelated sites during the class can be very disruptive to your fellow students. If I see you doing this, I will ask you to stop.

Attendance Policy

There is ample evidence that students who attend class regularly do better than those who don't. This, and the fact that you're investing a large amount of money to obtain a good education, should make questions about class attendance a no-brainer. You should come to class as often as you can. If you do miss a class, you will need to find a classmate to share notes with you. As much as I like talking about perception, I simply don't have the time to repeat classes for you during office hours or over email.

Accommodations for Students with Disabilities Access-Ability Services, 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 Access-Ability Services at the beginning of each academic term.

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 Studies (*Myra Fernandes from July 1, 2012 through June 30, 2014*) is available for consultation and to mediate a resolution between the student and instructor. Contact information is as follows:

Myra Fernandes Email: mafernan@uwaterloo.ca Ph 519-888-4567 ext 32142

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.

Academic Integrity, Academic Offenses, Grievance, and Appeals

To protect course integrity, as well as to provide appropriate guidance to students, course outlines in the Faculty of Arts must include 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.

[Further details: <http://www.uwaterloo.ca/academicintegrity/>]

Discipline: A student is expected to know what constitutes academic integrity [<http://www.uwaterloo.ca/academicintegrity/>], 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 instructor, 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>].

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>].

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>]. (Include also the following paragraph if you will be using Turnitin*): Plagiarism detection software (Turnitin) will be used to screen assignments in this course. This is being done to verify that use of all materials and sources in assignments is documented. In the first week of the term, details will be provided about arrangements for the use of Turnitin in this course.

Academic Integrity website (Arts): http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html

Academic Integrity Office (UW): <http://uwaterloo.ca/academicintegrity/>.

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.