

Psychology 304: Brain and Behaviour

Winter Session, 2012-2013, Section 002, Term 1
Monday/Wednesday/Friday, 2:00-3:00PM
Room 222, West Mall Swing Space Building

Instructor

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Teaching Assistant

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Office Hour: Monday, 3:00-4:00PM

Course Description: This course will provide students with a broad introduction to the biological basis of psychological experience and behaviour. Students will examine topics of concern to biological psychologists and the methods they use to investigate these topics. Among the topics that we will consider in the first term of this course are research methods, neuroanatomy, neurophysiology, neurotransmission, hormones, neurodevelopment, and sensory processing. Among the topics that you will consider in the second term of this course with Dr. Stan Floresco are sexual behaviour, homeostasis, sleep, emotion, learning, memory, and drug addiction.

Course Objectives: Students who successfully complete the first term of this course will be able to:

- *identify* the goals of biological psychology.
- *review* research methods in biological psychology.
- *discuss* ethical considerations in non-human animal research.
- *identify* the primary divisions, structures, and cells of the nervous system.
- *explain* the processes of neural communication and hormonal communication.
- *describe* the development of the nervous system.
- *review* the neural processes associated with touch, hearing, balance, taste, smell, and vision.
- *employ* biopsychological terminology.
- *recognize* the biological foundations of psychological experience and behaviour.
- *appreciate* the structural and functional complexity of the human nervous system.

Prerequisites: This course is open to all Arts and Science majors, with the exception of students who are registered in the BSc program in psychology. The prerequisites for this course are either: (a) Psychology 100, (b) Psychology 101 and 102, (c) two of Psychology 207, 208, 217, and 218, or (d) Psychology 260. First year students are not eligible to take this course. Credit for this course will not be given to students who have completed or are simultaneously enrolled in Psychology 360.

Course Format: Students will be expected to attend lectures and participate in active, in-class discussion. In addition, students must complete assigned readings from the textbook. In order to maximally benefit from class time, students are strongly encouraged to complete assigned readings before the readings are discussed in class.

Course Website: The website for this course is <http://www.psych.ubc.ca/~assanand>. In order to access materials on the website, you will require the following password: _____ . Lecture slides will be posted on the course website after each class period. Although the slides will provide a relatively comprehensive review of the lecture material, you may be examined on points that are discussed in class that are not presented in the slides. Grades will be posted on the course website by student number. I will notify the class via e-mail when I have posted grades on the course website.

On the course website, you will find a webpage entitled “Extras for Your Interest.” On this webpage, I will post links to films, video clips, popular press articles, and websites that are related to our course content. You are not required to view or read these resources; rather they are for your interest and reflection. I encourage you to send me relevant finds that you think would be of interest to your classmates; if appropriate, I will post them on the webpage. Extras for Your Interest will be updated periodically.

Textbook: Breedlove, Watson, & Rosenzweig (2010). *Biological Psychology: An Introduction to Behavioral, Cognitive, and Clinical Neuroscience* (6th edition). Massachusetts: Sinauer Associates.

Textbook Study Guide: A study guide for the textbook is available at <http://www.biopsychology.com/>. For each chapter, the study guide provides a chapter summary, a chapter outline, study questions (e.g., fill-in-the-blank questions, terminology quizzes, essay questions), tutorials, activities, and web links. The study guide is an excellent tool to assist you in reviewing course content.

In order to access the online practice quizzes that are available on the study guide website, you must create an account for yourself as follows:

1. Go to www.biopsychology.com.
2. Select the “Sixth Edition Companion Website.”
3. Select “Online Quizzes.”

4. Select "Create New Account."
5. Enter my e-mail address: assanand@psych.ubc.ca.
6. Enter your account information.

Once you have created an account, you can access the practice quizzes by selecting "Online Quizzes" and entering your e-mail address and password in the appropriate areas of the login page.

Evaluation: In the first term of this course, students will be given two exams, each of which will comprise 50% of their final grade for the term. Students' final grade in the course will be computed by averaging the final grades obtained for first term and second term.

The exams will consist of multiple choice questions, definitions, and open-ended extended response questions. Responses to multiple choice questions must be recorded on a scantron form in order to be graded. Accordingly, please bring an HB pencil and an eraser to each exam to allow for completion of the scantron form. Details about each exam (i.e., the number and types of questions) will be presented at the start of the class prior to the exam. The exams will not be cumulative.

The exams will cover both lecture and textbook material. The purpose of the lectures is to amplify, explain, and expand upon material presented in the textbook. Although there will be overlap between the lectures and the textbook, unique material will be presented in the lectures. Furthermore, some material from the textbook will not be discussed in class. Students are responsible for both the material presented in the lectures and the material presented in the textbook.

Please arrive to the exams on time. Students who arrive to an exam after a classmate has completed the exam and left the exam room will not be permitted to write the exam.

Exam dates are indicated in the Schedule of Course Topics (p. 7). Note that exams will not be rescheduled for students to accommodate academic workload, employment-related commitments, or travel. Please do not request an alternative exam date for these reasons. Exams may be rescheduled for students who are ill, in which case a doctor's note is required. The doctor's note must detail the student's illness and provide contact information for the physician to allow for verification of the note. Exams may also be rescheduled for students who have religious obligations that conflict with an exam date. If you are unable to write an exam as a result of illness, please contact me before the exam or within 24 hours after the exam. Students who do not contact me within 24 hours after the exam will be assigned a grade of "0" on the exam. If you are unable to write an exam as a result of religious obligations, please notify me within the first 2 weeks of class. If you are permitted to write a makeup exam, you must contact the Teaching Assistant to schedule an exam date within the shortest time period possible. Note that the content and/or format of the makeup exam may differ from the exam that was administered in class.

Participation: I strongly encourage and appreciate student participation. Participation may be in the form of questions or comments posed during class among your classmates or outside of class in discussion with me. I will make every effort to create a classroom environment in which students feel comfortable to discuss their ideas. If, however, you would prefer to share your ideas with me outside of class, you are welcome to see me during my office hours or by appointment.

In order to encourage and facilitate participation during class, I ask that all students respect their classmates' efforts to contribute to class discussion. Each member of the class should feel that she or he has the opportunity to participate; accordingly, please refrain from dominating opportunities for discussion. Courteous and considerate participation will foster a positive and informative classroom environment.

Students are expected to attend all class sessions, arrive to class on time, and remain in class until the session has ended.

Peer Learning Community: A peer learning community is an intentional and purposeful grouping of students who participate in a course together. The purposes of a peer learning community are numerous: to create a network of students who mentor one another outside of class; to provide students with the opportunity to engage in peer instruction; to expose students to diverse ideas and individuals; and to foster friendships among students. If you are interested in participating in a peer learning community for this course, please e-mail the Teaching Assistant by September 17. The Teaching Assistant and I will create an e-mail list to introduce interested students to one another. Through the term, I will make announcements for the peer learning community in class.

The “?” Box: A box labeled with a “?” will be available at the front desk during each class period. Students may use this box to:

- ask questions (e.g., Do we really use only 10% of our brain's capacity? What do the amacrine and horizontal cells of the retina do?).
- make suggestions (e.g., When reviewing sensory processing pathways, it would be helpful if you could speak at a slower pace).
- leave comments (e.g., In another class, we discussed an interesting study that suggests that humans respond to pheromones. In the study ...).

The purpose of the “?” box is to provide an additional mode of communication between you and me. You may submit a question, suggestion, or comment anonymously. However, I encourage you to provide me with your name and e-mail address. If I am not able to address your question, suggestion, or comment in class, I will respond to you directly via e-mail.

Missed Classes and Student Contacts: If you are unable to attend a class session, you should obtain notes for the missed material from a classmate. In order to facilitate this

process, you may want to acquaint yourself with classmates early in the course. Please take this opportunity to introduce yourself to two classmates in adjacent seats. If you are comfortable sharing contact information, you may write the information below.

Contact 1	Contact 2
Name:	Name:
Contact information:	Contact information:

E-Mail Correspondence: E-mail inquiries will be answered within 48 hours of receipt (not including weekends). E-mail inquiries should be limited to one question; students who have multiple questions should visit during office hours or schedule an appointment to meet with me or the Teaching Assistant. For questions related to course content, students should try to explain their current understanding of the material in the e-mail (which will be affirmed or corrected). Note that e-mails may not be answered the day before an exam, so please plan accordingly.

Laptop Use: The use of laptops in class is an effective means by which to take notes and record comments related to course content. However, some students use laptops in class to “surf” the internet, engage in e-mail correspondence, and/or work on material associated with other courses. These activities can be very distracting to those who sit in adjacent seats and can interfere with their efforts to focus on course content. For this reason, all students who intend to use their laptop in class for activities unrelated to the course are asked to sit in rows at the rear of the classroom.

Requests for Adjustments of Grades and Academic Concession: You may review your exams with the Teaching Assistant. Requests for the adjustment of a grade must be made within 4 weeks of the posting of that grade. Most requests for adjustment can be settled directly with the Teaching Assistant. In cases of a dispute that cannot be satisfactorily resolved with the Teaching Assistant, please contact me.

During your time in this course, if you encounter medical, emotional, or personal problems that you believe may affect your performance on an exam, please notify me. You may be able to obtain academic concession from the Dean of your faculty. Please discuss any extenuating circumstances with me prior to exam dates. In order to ensure equity among the students in the class, accommodations will not be made after an exam has been written. Furthermore, the relative weight of the exams will not be changed for any given student. Accordingly, please do not e-mail me to request that I change the relative weight of the course requirements for you or add percentage points to a grade in order to

increase your final standing in the course. For further information on academic concession, consult Policies and Regulations in the UBC Calendar (<http://www.calendar.ubc.ca/vancouver/index.cfm>).

Psychology Department's Policy on Distribution of Grades: Courses offered by the Psychology Department are required to meet a target grade distribution. This is done in order to ensure that all students are assessed fairly in relation to students in other sections of the same course and students in other courses. The target grade distribution for 300-level psychology courses requires that the mean for the class fall between 66% and 70%, with a standard deviation of approximately 13%. Accordingly, students should note that the Psychology Department may adjust the final grades in this course up or down if the distribution of grades deviates substantially from the target. A student's grade is not official until it appears on the student's academic record.

Academic Misconduct: Cheating and other forms of academic misconduct are very serious concerns of the University, and the Psychology Department has taken steps to alleviate them. The Department employs software that can reliably detect cheating on multiple choice exams by analyzing the patterns of students' responses. This software will be used to analyze students' responses to the multiple choice questions on the exams in this course. In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Evidence of academic misconduct may result in a "0" credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript. For further information on student conduct and discipline, consult Policies and Regulations in the UBC Calendar (<http://www.calendar.ubc.ca/vancouver/index.cfm>) and the University Counsel's policy on student discipline (<http://universitycounsel.ubc.ca/discipline/>).

Please note that, during exams, invigilators may ask students to move or alter students' seating arrangements with no explanation provided. An invigilator may ask you to move due to the possible misconduct of a classmate in an adjacent seat.

Academic Accommodation: The University accommodates students with disabilities who have registered with Access and Diversity (<http://www.students.ubc.ca/access/index.cfm>). Please let me know in advance, preferably within the first 2 weeks of class, if you require accommodation on these grounds.

Withdrawal Dates: If you wish to withdraw from this course without any record of the course on your transcript, you must do so by September 21, 2012. If you wish to withdraw from this course with a withdrawal standing of "W" on your transcript, you must do so by November 23, 2012.

Schedule of Course Topics: The schedule provided below may be changed to accommodate class interest and discussion. Any changes will be announced in class.

Week	Topic	Required Reading
September 3	Syllabus Review Introductory Concepts Research Methods	Chapter 1 (p. 1-14) Chapter 2 (p. 28-29, 50-55), Chapter 3 (p. 81-84)
September 10	Research Methods Neuroanatomy	Chapter 2 (p. 23-27, 29-50)
September 17	Neuroanatomy	
September 24	Neuroanatomy Neurophysiology	Chapter 3 (p. 57-81)
October 1	Neurophysiology	
October 8	Neurotransmitters and Neuropharmacology Hormones	Chapter 4 (p. 87-101; excluding Figure 4.8) Chapter 5
October 15	Hormones	
October 22	<i>Midterm Exam:</i> <i>Part A: October 22 (multiple choice questions, definitions)</i> <i>Part B: October 24 (extended response questions)</i> Life-Span Development of the Nervous System	Chapter 7
October 29	Life-Span Development of the Nervous System	
November 5	Life-Span Development of the Nervous System Sensory Processing and Touch	Chapter 8 (p. 215-234)
November 12	Sensory Processing and Touch Hearing, Vestibular Perception, Taste, and Smell	Chapter 9
November 19	Hearing, Vestibular Perception, Taste, and Smell Vision	Chapter 10 (p. 281-289, 290-295, 301-306, 310-314; see lecture slides for excluded section headings)
November 26	Vision	
	<i>December Exam:</i> <i>Date to be scheduled by the Registrar's Office. Do not book travel during the examination period, December 5 to 19.</i>	