

PSYC 271: Brain and Behaviour I
Fall 2015
Wed 4:00-5:30; Fri 2:30-400

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Text: Pinel JPJ (2013) Biopsychology, 9th edition. Pearson: USA. ISBN: 978-0-205-91557-6

Brain and Behavior I is an introduction to behavioural neuroscience. The course primarily focuses on the basics of neuronal operation, functional neuroanatomy, neuropharmacology and behavioural neuroscience methods. This will be followed by an examination of input (sensory) and output (motor) systems of the brain. Finally, topics relevant to memory, sleep, lateralization of function and language will be covered.

Objectives of this course are as follows:

To introduce the topic areas that contribute to knowledge about the brain and its role in the control of behaviour.

To augment critical thinking about research findings and how they can be used to inform the relationship between brain and behaviour.

To demystify some of the mental phenomena that result from the normal and abnormal functioning of the brain.

Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see <http://www.academicintegrity.org>). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities <http://www.queensu.ca/secretariat/policies/senateandtrustees/principlespriorities.html>).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1 http://www.queensu.ca/artsci/sites/default/files/academic_regulations.pdf), on the Arts and Science website (see <http://www.queensu.ca/artsci/students-at-queens/academic-integrity>), and from the instructor of this course.

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions that contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

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Evaluation will be based on two in-class examinations during the term, and a comprehensive final during the December examination period. The two in-class examinations will each cover material from the portion of the course that preceded it. Combined these two tests will contribute 50 marks towards your final grade; the better of the two will be given a weight of 60% and the poorer of the two will be assigned a weight of 40%. These two tests will consist of short-answer and multiple-choice questions. The comprehensive final will contribute the remaining 50 marks toward your final grade, it will consist multiple-choice questions only.

Tentative Schedule

Date	Topic	Chapter
Sept 16	First Lecture - Course Overview	
18	Biopsychology as a Neuroscience	1
23	History Neuroscience	2
25	Evolution/ Genetics	2
30	Anatomy	3
Oct 2	Anatomy	3
7	Neurons & Signals: Brain Cells	4
9	Neurons & Signals: Electrical Communication	4
14	Neurons & Signals: Chemical Communication	
16	TEST 1	4
21	The Visual System	6
23	The Visual System	6
28	The Visual System	6
30	Mechanism of Perception: Taste, Smell	7
Nov 4	Hearing (guest lecture)	7
6	No Class - Video	
11	TEST 2	
13	Neurotransmitters	
18	Sensory Motor	8
20	Sensory Motor	8
25	Memory	11
27	Sleep	14
Dec 2	Lateralization	16
4	Language - Final Lecture	16

* There are no deferred mid-term examinations. If you miss one and have a valid reason (documentation required), 25 marks will be added to the December final exam, which will instead be worth 75% of the final grade.

** If you cannot attend the final comprehensive exam in December due to serious, extenuating circumstances (documentation required), you must be available to write a deferred exam during the Psychology Department's Make up Exam period January 8th, 2016.

*** Appropriate documentation includes a signed letter from a registered health professional, Queens HC&DS, or documentation of a death such as a bulletin from a memorial service, obituary (newspaper or online) or funeral home letter. Official documents will be copied and originals returned to the student. Note that the PSYC department randomly checks document authenticity and that fraudulent documents will be grounds for a finding of a major departure from academic integrity.