Brain & Behaviour I
PSYC 271
Fall 2017

Instructor: Dr. Tyson W. Baker
Contact: Tyson.Baker@Queensu.ca

Lectures in Dunning Auditorium: Monday 8:30am-10:00am
Thursday 10:00am-11:30am
Office Hours in Humphrey 235: Monday 10:00am-11:00am
Thursday 11:30am-12:30pm

Teaching Assistant (TA): Louisa Man
Contact: Louisa.Man@Queensu.ca

Office Hours: See OnQ and by Appointment

Course Site

will be available on OnQ. OnQ will be used to communicate with the class regarding any cancellations, so please be sure to check in regularly. I highly-encourage using the discussion board for class-related content.

Your textbook comes with complimentary access to Revel as an optional supplement to the textbook and lectures. Detailed login instructions are posted on OnQ. If you have any technical problems, take a screenshot and check the help menu. If that doesn't work email the screenshot and a detailed description of the problem to me and your TA.

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

3 credit hours

Pre-requisites: PSYC 100

Required Materials: John P.J. Pinel & Steven J. Barnes. *Biopsychology. 10th Edition*. Pearson.
-Comes with complementary Revel access in the bookstore (Revel is an optional e-text with quizzes)
-9th edition is acceptable, but 10th is best.

Course Content

This schedule is subject to change and not all chapters will be covered in exactly 2 lectures.

(Date)	**Topic**	**Relevant Readings**
Sept 11	General Course Introduction	This syllabus
Sept 14,18	Introduction to Biopsychology	Chapter 1
Sept 21, 25	Evolution, Genetics, & Experience	Chapter 2
Sept 28, Oct 2	Anatomy of the Nervous System	Chapter 3
Oct 5	**Midterm Exam 1 (30%)**	**Chapters 1-3**
Oct 9	**Thanksgiving: No Classes**	
Oct 12, 16	Neural Conduction and Synaptic Transmission	Chapter 4
Oct 19, 23	The Research Methods of Biopsychology	Chapter 5
Oct 26, 30	Perception: The Visual System	Chapter 6
Nov 2	Leftovers & Review	Chapters 4-6
Nov 6	**Midterm Exam 2 (30%)**	**Chapters 4-6**
Nov 9, 13	Perception: Hearing, Touch, Smell, Taste, Attention	Chapter 7
Nov 16, 20	The Sensorimotor System	Chapter 8
Nov 23, 27	Learning, Memory, and Amnesia	Chapter 11

Bonus Marks
Students can earn **up to 3% in bonus marks** for participation in psychological research outside of class. You can sign up and get instructions on http://queensu.ca/psychology/undergraduate/participant-pool-information

All components of this course will receive numerical percentage marks. Your course total will be rounded according to mathematical convention. Your rounded course total will be converted to a letter grade according

A+	90-100
A	

Intended Student Learning Outcomes
By Midterm Exam 1, students are expected to be able to compare and contrast the subdisciplines of biopsychology and identify their role in converging operations, describe how research on evolution of the human brain has changed over time, define epigenetics, and explain how it is transforming our understanding of genetics, identify parts of the brain and brain cells.

By Midterm Exam 2, students are expected to be able to understand how neurons fire action potentials and communicate with one another, compare and contrast brain imaging techniques, psychophysiological measures of brain activity, psychological and physiological brain measurement and forms of brain manipulation, identify the processes that our visual system uses to turn our physical environment into neural signals and how these neural signals operate.
By the Final Exam, students are expected to be able to identify the processes that our other (non-visual) senses turn our physical environment into neural signals and how these neural signals operate, explain what is meant by a hierarchy of central sensorimotor programs, and explain the importance of this arrangement or sensorimotor functioning (in other words, how we produce behaviours), how the brain acquires, maintains, and loses knowledge

By the end of the course, a student may be able to understand how our biological machinery allows us to convert physical input into sensory experiences, thoughts, and behaviour.

Academic Integrity
Academic Integrity is constituted by the six core fundamental values of honesty, trust, fairness, respect, responsibility and courage (see 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/senate/report-principles-and-priorities).

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/academic-calendars/regulations/academic-regulations/regulation-1), on the Arts and Science website (see http://www.queensu.ca/artsci/academics/undergraduate/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 Que7 Tm0 g7 0 g7 0 g7 0 g7 0 g7 0 g7 0 g7 0 g7 0 g7 0 g7 5 12 Tf1 0 0 1 401

Privacy

This course makes optional use of Revel for augmenting studying. Be aware that by logging into the site, you will be leaving OnQ, and accessing website and Revel. Your independent use of

subject to terms of use and privacy policy. You are encouraged to review these documentsth e e