PSYC 370 - Brain and Behaviour II - 2013 - For use with 8th Edition

Instructor: Dr. Janet Menard **Office Hours:** Mondays 1:00-2:00

Office: Craine - 431 **Phone:** 533-3099

Email: menard@queensu.ca

Teaching Assistant: Meaghan Wilkin **Office Hours:** Friday 1:00 – 2:00

Office: Humphrey 324 Email: 7mw22@queensu.ca

Text: Biopsychology (2006, 8th edition)

JPJ Pinel

Allyn and Bacon

EXAMS AND GRADING

DATE	EXAM	MATERIAL COVERED	% OF FINAL MARK
Monday, February 4	Midterm Exam I	Section 1- Chapters 9, 10, 16 (general exam format, see below)	25%
Monday, March 11	Midterm Exam 11	Section 2 - Chapters 12, 13, 14 (general exam format)	25%
	Final Exam	Section 3 - Chapters 15, 17, 18 (general exam format)	25%
		Chapters 9-18 (no Chapter 11) (multiple choice only)	25%

General exam format: Exams will consist of fill-in-the-blank, definitions, short answer and multiple-choice questions. Short answer and fill-in-the blank questions cover material that is delivered during lectures. Any material in the text is fair game for a multiple choice question, regardless of whether was covered in lectures or not. Thus, YOU ARE RESPONSIBLE FOR ALL OF TEXT MATERIAL FROM THE ASSIGNED CHAPTERS, INCLUDING MATERIAL FROM PAGES THAT DO NOT APPEAR ON THE RECOMMENDED READING LIST. That list is purely meant to help you prepare for the lectures.

NOTE: There are NO MAKEUP EXAMS FOR THE TWO MIDTERMS. Excused absences (e.g., illness, family crisis) from the midterm must be documented. The weight of the missed midterm will be either 1) transferred to the final exam OR 2) 10% can be transferred to the other midterm and 15% to the final (this latter option has to be chosen before you write the final. Contact me by email and let me know your choice. If you do not contact me before the final then Option 1 will be applied when tabulating your final grade). Unexcused absences from a midterm will counts as 0. For information regarding missed FINAL EXAMS, lease read PSYC Departmental Policies for Missed Exams on the following page.

PSYC Departmental Policies

Missed Exams

Students who cannot write an exam during the December or April exam period due to a serious, extenuating circumstance (illness, death in the family) must follow the steps below to be eligible, and be available to write a deferred exam during the PSYC department's *Make up Exam period*: January 13/14th, April 28/30th, or September 14/15, 2012.

- 1. Obtain permission from their instructor to write a deferred exam. This requires notifying your instructor in advance or, under extraordinary circumstances, within 72 hours after, the exam, with appropriate documentation. Please use the *Request for an Exam Deferral* form found on our website or from the UG office and attach your documentation.
- 2. Complete and return the instructor-signed *Permission for an Incomplete Grade* form available on the Arts and Science website and return it to the UG office. http://www.queensu.ca/artsci/sites/default/files/Permission for an incomplete grade%2021jan2011.pdf
- 3. Be available to write the makeup exam during the first available PSYC *Make up Exam period:* January 13/14th, April 28/30th, or September 14/15, 2012.

NOTE: Students who do not write the makeup exam are advised to drop the course. If a student cannot write the makeup exam due to a serious extenuating circumstance for which they can provide new documentation, they will either be granted a second deferral by their instructor or be supported in their appeal to drop the course after the deadline though this decision rests with the Associate Dean (Studies).

Accommodation after the fact

Once a student has written an exam or submitted an assignment, they may not subsequently be granted accommodation such as being offered a second opportunity to write the exam or assignment or have it count for less than originally specified in the course syllabus (reweighted).

Travel during exams

According to university regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods as well as during any scheduled class times. Requests to write a make-up exam because of conflicting travel plans (e.g. flight bookings) or requests to miss an in class exam due to other plans will NOT be considered except under extraordinary circumstances. Students are advised to wait until the final exam schedules are posted before making any travel arrangements.

¹ 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.

MARKING SCHEME

Psych 370 will utilize a "*Numbers In, Letters Out*" marking scheme: You will be given a percentage (%) grade for the 1rst and 2^{nd} midterm exams (e.g., 92% and 89%). (Midterm marks will be posted on Moodle.) A percentage grade will be calculated for the final exam (e.g., 96%), and the 3 grades will be used to determine a weighted average (e.g., [(.25 * 92) + (.25 * 89) + (.50 * 96)] = a weighted average of 93.25). The final % grade will then be converted to a letter grade (e.g., 93.25% = A+; ©).

The final grade you receive for the course will be derived by converting your numerical course average to a letter grade, according to Queen's Official Grade Conversion Scale.

Queen's Official Grade Conversion Scale

Grade	Numerical Course Average (Range)	
A+	90-100	
Α	85-89	
A-	80-84	
B+	77-79	
В	73-76	
B-	70-72	
C+	67-69	
С	63-66	
C-	60-62	
D+	57-59	
D	53-56	
D-	50-52	
F	49 and below	

SECTION 1 - BRAIN PLASTICITY				
Monday, Jan 7	Introductory Lecture - Course Overview			
Wednesday, Jan 9	Development of the Nervous System: - prenatal neurodevelopment	Chapter 9: Pages 220-227		
Friday, Jan 11	Development of the Nervous System: - postnatal development	Chapter 9: Pages 228-234		
Monday, Jan 14	Development of the Nervous System - disorders of neurodevelopment (FAS)	Chapter 9: pages 234-239		
Wednesday, Jan 16	Lateralization, Language & the Split Brain: - the split brain	Chapter 16: Pages 414-422		
Friday, Jan 18	Brain Damage and Neuroplasticity - causes of brain damage	Chapter 10: Pages 241-247		
Monday, Jan 21	Brain Damage and Neuroplasticity - neuropsychological diseases: epilepsy	Chapter 10: Pages 247-250		
Wednesday, Jan 23	Class Cancelled – recommended lectures online (NOT REQUIRED)			
	http://www.hhmi.org/biointeractive/neuroscience/lectures.html Lecture 1 — Mapping Memory in the Brain, by Eric R. Kandel, M.D. Lecture 2 — Building Brains: The Molecular Logic of Neural Circuits, by Thomas M. Jessell, Ph.D.			
Friday, Jan 25	Brain Damage and Neuroplasticity - neuropsychological diseases: Huntington's	Chapter 10: Page 250		
Monday, Jan 28	Brain Damage and Neuroplasticity - neuropsychological diseases: Parkinson's disease			
Wednesday, Jan 30	Brain Damage and Neuroplasticity - neuropsychological diseases: Alzheimer's	Chapter 10: Pages 251-253 Chapter 11: Page 275-277		
Friday, Feb 1	Brain Damage and Neuroplasticity - neuroplastic responses to nervous system damage	Chapter 10: Pages 255-264		
Monday, Feb 4	MIDTERM EXAM 1 -BRAIN PLASTICITY	Chapters 9, 10 and 16		

SECTION 2 - MOTIVATION				
Wednesday, Feb 6	Hunger, Eating, and Health: - digestion and energy flow; theories of hunger, eating and body weight regulation	Chapter 12: Pages 299-308; 314-318		
Friday, Feb 8	Hunger, Eating, and Health: - neural regulation of hunger and satiety	Chapter 12 Pages 309-311		
Monday, Feb 11	Hunger, Eating, and Health: - obesity	Chapter 12: Pages 318-322		
Wednesday, Feb 13	Hunger, Eating, and Health: - eating disorders: anorexia	Chapter 12: Pages 322-325		
Friday, Feb 15	Hormones and Sex - the neuroendocrine system	Chapter 13: Pages 328-333		
Feb 18 - 22	READING WEEK			
Monday, Feb 25	Hormones and Sex - hormones and sexual development - disorders of sexual development	Chapter 13: Pages 333-343		
Wednesday, Feb 27	Hormones and Sex - neural regulation of sexual behavior	Chapter 13: Pages 348-350		
Friday, Mar 1	Sleep, Dreaming, and Circadian Rhythms: - the physiology of sleep; theories of sleep	Chapter 14: Pages 348-360		
Monday, Mar 4	Sleep, Dreaming, and Circadian Rhythms: - sleep, learning and memory	No readings		
Wednesday, Mar 6	Sleep, Dreaming, and Circadian Rhythms: - the circadian clock; neural mechanisms of sleep	Chapter 14: Pages 366 -373		
Friday, Mar 8	Sleep, Dreaming, and Circadian Rhythms: - sleep disorders	Chapter 14: Pages 375-377		
Monday, Mar 11	MIDTERM EXAM II - MOTIVATION	Chapters 12 – 14		

SECTION 3 - DISORDERS OF COGNITION AND EMOTION			
Wednesday, Mar 13	Drug Addiction and the Brain's Reward Circuits - basic principles of drug action - role of learning in drug tolerance and withdrawal	Chapter 15: Pages 384-389	
Friday, Mar 15	Drug Addiction and the Brain's Reward Circuits - biopsychological theories of addiction - drug addiction and the brain's reward system	Chapter 15: Pages 399-409	
Monday, Mar 18	Drug Addiction and the Brain's Reward Circuits - chronic drug abuse-induced changes in brain	No readings	
Wednesday, Mar 20	Biopsychology of Emotion, Stress, and Health: - the stress response - stress and the hippocampus	Chapter 17: Pages 435-436 Pages 440-441	
Friday, Mar 22	Biopsychology of Emotion, Stress, and Health: - early experience of stress - individual differences in sensitivity to stress	Chapter 17 Page 440	
Monday, Mar 25	Biopsychology of Emotion, Stress, and Health: - fear conditioning and the amygdala	Chapter 17: Pages 441-443	
Wednesday, Mar 27	Biopsychology of Emotion, Stress, and Health: - emotions and facial expression - brain mechanisms of human emotion; fear and the human amygdala	Chapter 17: Pages 431 Pages 443-447	
Friday, Mar 29	GOOD FRIDAY – NO CLASS		
Monday, April 1	Biopsychology of Psychiatric Disorders: - schizophrenia	Chapter 18: Pages 449-454	
Wednesday, April 3	Biopsychology of Psychiatric Disorders: - schizophrenia	No readings	
Friday, April 5	Biopsychology of Psychiatric Disorders: - affective disorders: depression	Chapter 18: Pages 454-458	