

Instructor: Dr. Janet Menard
Office: Craine - 431
Phone: 533-3099
Email: menard@queensu.ca

Office Hours: Thursdays 4:00-5:00

Teaching Assistant: Steve Lamontagne
Office: Craine 403
Email: 9sjl7@queensu.ca

Office Hours: Fridays 1:30-2:30

Text: Biopsychology (8th or 9th edition)
 JPJ Pinel
 Allyn and Bacon

INTENDED STUDENT LEARNING OUTCOMES

To complete this course, students will demonstrate their ability to:

1. Outline the primary stages of neural development in humans.
2. Describe the process of neuroplasticity and how it relates to learning.
3. Summarize current theories on the biopsychology of eating, sleeping, sexual behaviour, and drug addiction.
4. Evaluate research findings relating to the biopsychology of motivation, cognition, and emotion.

EXAMS AND GRADING

DATE	EXAM	MATERIAL COVERED	% OF FINAL MARK
Tuesday February 7	Midterm Exam I	Section 1- Chapters 9, 10 (general exam format, see below)	25%
Tuesday March 14	Midterm Exam II	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 (but excluding Chapters 11 & 16) (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.

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 documentation¹. 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](http://www.queensu.ca/artsci/sites/default/files/Permission%20for%20an%20incomplete%20grade%202011jan2011.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 1st and 2nd 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
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

SECTION 1 - BRAIN PLASTICITY		
Tuesday, Jan 10	Course Organization	
Thursday, Jan 12	Development of the Nervous System: - prenatal neurodevelopment	Chapter 9 Pages 213-220
Friday, Jan 13	Development of the Nervous System: - postnatal development	Chapter 9 Pages 213-220
Tuesday, Jan 17	Development of the Nervous System - disorders of neurodevelopment: Fetal Alcohol Syndrome	Chapter 9 Pages 227-231
Thursday, Jan 19	Brain Damage and Neuroplasticity - disorders of neurodevelopment: Autism and Fragile X	supplementary
Friday, Jan 20	Lecture Cancelled - At Home Assignment - Building Brains: The Molecular Logic of Neural Circuits, TM Jessell, Ph.D. http://www.hhmi.org/biointeractive/neuroscience/lectures.html	
Tuesday, Jan 24	Brain Damage and Neuroplasticity - neuropsychological diseases: epilepsy	Chapter 10 Pages 240-242
Thursday, Jan 26	Brain Damage and Neuroplasticity - neuropsychological diseases: Huntington's	Chapter 10 Page 243
Friday, Jan 27	Brain Damage and Neuroplasticity - neuropsychological diseases: Parkinson's disease	Chapter 10 Page 242
Tuesday, Jan 31	Brain Damage and Neuroplasticity - neuropsychological diseases: Alzheimer's	Chapter 10 Pages 244-246
Thursday, Feb 2	Brain Damage and Neuroplasticity - responses to brain damage	Chapter 10 Pages 247-256
Friday, Feb 3	Lecture Cancelled - At Home Assignment Mapping Memory in the Brain, by Eric R. Kandel, MD http://www.hhmi.org/biointeractive/neuroscience/lectures.html	
Tuesday, Feb 6	MIDTERM EXAM 1 -BRAIN PLASTICITY	Chapters 9 & 10

SECTION 2 - MOTIVATION		
Thursday, Feb 8	Hunger, Eating, and Health: - digestion and energy flow; phases of energy metabolism	Chapter 12 Pages 288-290
Friday, Feb 10	Hunger, Eating, and Health: - neural regulation of hunger and satiety	Chapter 12 Pages 297-301
Tuesday, Feb 14	Hunger, Eating, and Health: - obesity	Chapter 12 Pages 305-309
Thursday, Feb 16	Hunger, Eating, and Health: - eating disorders: anorexia	Chapter 12 Pages 309-312
Friday Feb 17	No Class - use this opportunity to review material class and to catch up (or get ahead!) in the readings	
Feb 20-24	READING WEEK	
Tuesday, Feb 28	Hormones and Sex - hormones and sexual development - disorders of sexual development	Chapter 13 Pages 320-340
Thursday, Mar2	Hormones and Sex - neural regulation of sexual behavior	Chapter 13 Pages 334-336
Friday, Mar 3	Sleep, Dreaming, and Circadian Rhythms: - sleep physiology - sleep and learning and memory	Chapter 14 Pages 343-344
Tuesday, Mar 7	Sleep, Dreaming, and Circadian Rhythms: - sleep, the immune and lymphatic systems	No readings
Thursday, Mar 9	Sleep, Dreaming, and Circadian Rhythms: - the circadian clock	Chapter 14 Pages 352-357
Friday, Mar 10	Sleep, Dreaming, and Circadian Rhythms: - sleep disorders	Chapter 14 Pages 360-362
Tuesday, Mar 14	MIDTERM EXAM II - MOTIVATION	Chapters 12 – 14

SECTION 3 - DISORDERS OF COGNITION AND EMOTION		
Thursday, Mar 16	Drug Addiction and the Brain's Reward Circuits - biopsychological theories of addiction - drug addiction and the brain's reward system	Chapter 15 Pages 384-391
Friday, Mar 17	Drug Addiction and the Brain's Reward Circuits - chronic drug abuse-induced changes in brain	Chapter 15 No readings
Tuesday, Mar 21	Biopsychology of Emotion, Stress, and Health: - the stress response - stress and the hippocampus	Chapter 17 Pages 438-440
Thursday, Mar 23	Biopsychology of Emotion, Stress, and Health: - early experience of stress - individual differences in sensitivity to stress	Chapter 17 Pages 442-443
Friday, Mar 24	Biopsychology of Emotion, Stress, and Health: - fear conditioning and the amygdala	Chapter 17 Pages 433-435
Tuesday, Mar 28	Biopsychology of Emotion, Stress, and Health: - emotions and facial expression - brain mechanisms of human emotion; fear and the human amygdala	Chapter 17 Pages 428-430 Pages 436-438
Thursday, Mar 30	Biopsychology of Emotion, Stress, and Health: - neurobiology of social bonding	Chapter 17 No readings
Friday, Mar 31	Biopsychology of Psychiatric Disorders: - schizophrenia – neurodevelopmental theory	Chapter 18 Pages 447-449
Tuesday, April 4	Biopsychology of Psychiatric Disorders: - schizophrenia – dopamine theory; brain damage	Chapter 18 Pages 449-453
Thursday, April 6	Biopsychology of Psychiatric Disorders: - affective disorders: depression – diathesis stress theory	Chapter 18 Pages 454-459
Friday, April 7	Biopsychology of Psychiatric Disorders: - emotion regulation - stress, meditation and the brain	Chapter 18 No readings