PSYC 370 - Brain and Behaviour II - 2015 - For use with 9th Edition

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Text: Biopsychology (2006, 9th edition)

JPJ Pinel

Allyn and Bacon

EXAMS AND GRADING

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

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 questions regardless of whether it was covered in the lectures. Thus, YOU ARE RESPONSIBLE FOR ALL 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, please 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:* **Friday, January 8**th, **2016.**

- 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

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.

MARKING SCHEME

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.

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 | | | |
|------------------------------|---|----------------|---|
| Tuesday, Sept. 15 | Course Organization | | |
| Wed., Sept. 16 | Development of the Nervous System: - prenatal neurodevelopment | | Chapter 9: Pages 213-220 |
| Friday, Sept. 18 | Development of the Nervous System: - postnatal development Chapte Pages 2 | | er 9: 221-226 |
| Tuesday, Sept. 22 | Development of the Nervous System - disorders of neurodevelopment (FAS) | | Chapter 9: pages 227-231 |
| Wed., Sept. 23 | Brain Damage and Neuroplasticity - causes of brain damage | | Chapter 10: Pages 233-239 |
| Friday, Sept. 25 | NO CLASS - use this opportunity review of material covered in class to catch up (or get ahead!) in the text reading | and | |
| Tuesday, Sept. 29 | Brain Damage and Neuroplasticity - neurological diseases: epilepsy | | Chapter 10: Pages 240-242 |
| Wed., Sept. 30 | Brain Damage and Neuroplasticity - neurological diseases: Parkinson's | | Chapter 10: Page 242 |
| Friday, Oct. 2 | Brain Damage and Neuroplasticity - neurological diseases: Huntington's disease | | Chapter 10: Page 243 |
| Tuesday, Oct. 6 | Brain Damage and Neuroplasticity - neurological diseases: Alzheimer's | | Chapter 10: Pages 244-246 Chapter 11: Page 267 |
| Wed., Oct. 7 | Brain Damage and Neuroplasticity - neuroplastic responses to nervous system damage | | Chapter 10: Pages 247-256 |
| Friday, Oct. 9 | Lecture Cancelled: At Home Assignment http://www.hhmi.org/biointeractive/neuroscience/lectures Making Your Mind: Molecules, Motion and Memory Lecture 1 — Mapping Memory in the Brain, by Eric F Kandel, M.D. | s <u>.html</u> | Chapters 9 & 10 |

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| | Lecture 2 — Building Brains: The Molecular Logic of Neural Circuits, by Thomas M. Jessell, Ph.D. | |
|------------------|---|-----------------|
| Tuesday, Oct. 13 | MIDTERM EXAM 1 -BRAIN PLASTICITY | Chapters 9 & 10 |

| SECTION 2 - MOTIVATION | | |
|------------------------|--|--|
| Wed., Oct. 14 | Hunger, Eating, and Health: - digestion and energy flow; theories of hunger, eating and body weight regulation | Chapter 12: Pages 287-295; 301-303 |
| Friday, Oct. 16 | Hunger, Eating, and Health: - neural regulation of hunger and satiety | Chapter 12 Pages 297-301 |
| Tuesday, Oct. 20 | Hunger, Eating, and Health: - obesity | Chapter 12: Pages 305-309 |
| Wed., Oct. 21 | Hunger, Eating, and Health: - eating disorders: anorexia | Chapter 12: Pages 309-312 |
| Friday Oct. 22 | Hormones and Sex - the neuroendocrine system | Chapter 13: Pages 315-320 |
| Tuesday, Oct. 27 | Hormones and Sex - hormones and sexual development - disorders of sexual development | Chapter 13: Pages 320-340 |
| Wed., Oct 28 | Hormones and Sex - neural regulation of sexual behavior | Chapter 13: Pages 334-336 |
| Friday, Oct. 29 | Sleep, Dreaming, and Circadian Rhythms: - the physiology of sleep; theories of sleep | Chapter 14: Pages 341-347 |
| Tuesday, Nov. 3 | Sleep, Dreaming, and Circadian Rhythms: - sleep, learning and memory | No readings |
| Wed., Nov. 4 | Sleep, Dreaming, and Circadian Rhythms: - the circadian clock; neural mechanisms of sleep | Chapter 14: Pages 352-357 |
| Friday, Nov. 6 | Sleep, Dreaming, and Circadian Rhythms: -drugs that affect sleep -sleep disorders | Chapter 14: Pages 358-362 |
| Tuesday, Nov. 10 | MIDTERM EXAM II - MOTIVATION | Chapters 12 – 14 |

| SECTION 3 - DISORDERS OF COGNITION AND EMOTION | | |
|--|---|---|
| Wed., Nov. 11 | Drug Addiction and the Brain's Reward Circuits - basic principles of drug action - role of learning in drug tolerance and withdrawal | Chapter 15: Pages 368-374 |
| Friday, Nov. 13 | Drug Addiction and the Brain's Reward Circuits - biopsychological theories of addiction - drug addiction and the brain's reward system | Chapter 15: Pages 374-392 |
| Tuesday, Nov. 17 | Drug Addiction and the Brain's Reward Circuits - chronic drug abuse-induced changes in brain | No readings |
| Wed., Nov. 18 | Biopsychology of Emotion, Stress, and Health: - the stress response - stress and the hippocampus | Chapter 17: Pages 438-440 |
| Friday, Nov. 20 | Biopsychology of Emotion, Stress, and Health: - early experience of stress - individual differences in sensitivity to stress | Chapter 17 Page 440-444 |
| Tuesday, Nov. 24 | Biopsychology of Emotion, Stress, and Health: - fear conditioning and the amygdala | Chapter 17: Pages 431-435 |
| Wed., Nov. 25 | Biopsychology of Emotion, Stress, and Health: - emotions and facial expression - brain mechanisms of human emotion; fear and the human amygdala | Chapter 17: Pages 424-428 Pages 435-438 |
| Friday, Nov. 27 | Biopsychology of Psychiatric Disorders: - schizophrenia | Chapter 18: Pages 447-453 |
| Tuesday, Dec. 1 | Biopsychology of Psychiatric Disorders: - schizophrenia | No readings |
| Wed., Dec. 2 | Biopsychology of Psychiatric Disorders: - affective disorders: depression and anxiety | Chapter 18: Pages 453-462 |
| Friday, Dec. 4 | Review for Final Exam! | |