

Contact – PSYC 370 Teaching Team – Psyc370@queensu.ca

**Text:** Biopsychology 10<sup>th</sup> or 11<sup>th</sup> edition; eTextbook C\$67.99 for 12 months access; no restrictions on using 2<sup>nd</sup> hand copy  
 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. Summarize current perspectives on various forms of brain damage, including neurodegenerative disorders
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
Monday February 2	Midterm Exam I	Section 1- Chapters 9, 10 general exam format, see below	25%
Monday March 9	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 (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.**

**NOTE: There are NO MAKEUP EXAMS FOR THE TWO MIDTERMS. If you have an excused absence from a midterm, the weight 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 must be chosen *before* you write the final). Contact me by email to let me know your choice.**

**IF YOU HAVE AN EXCUSED ABSENCE FROM THE FINAL EXAM, THE DEPT. OF PSYCHOLOGY WILL BE HOLDING A MAKE-UP FINAL EXAM. PLEASE CONTACT THE UNDERGRADUATE CHAIRS OFFICE FOR FURTHER DETAILS.**

**OBTAINING AN EXCUSED ABSENCE FROM AN EXAM**

**If you are ill or facing other extenuating circumstance and cannot write one of the exams contact the Faculty of Art & Sciences portal: <http://www.queensu.ca/artsci/accommodations>. Do this prior to the exam - the faculty will notify me about your absence. You do not have to contact me, but you must register your absence at the accommodation’s portal (see below for further details).**

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

**MARKING SCHEME**

Psych 370 has a “**Numbers In, Letters Out**” marking scheme: You will be given a percentage (%) grade for the 1st and 2<sup>nd</sup> 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***

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

SECTION 1 - BRAIN PLASTICITY			
<b>WEEK 1</b>	Monday, Jan 5	<b>Course Orientation</b>	
	Wednesday Jan 7	<b>Development of the Nervous System</b> <ul style="list-style-type: none"> <li>• Prenatal neurodevelopment</li> </ul>	Chapter 9
	Friday, Jan 9	<b>Development of the Nervous System</b> <ul style="list-style-type: none"> <li>• Postnatal development</li> </ul>	Chapter 9
<b>WEEK 2</b>	Monday, Jan 12	<b>Development of the Nervous System</b> <ul style="list-style-type: none"> <li>• Disorders of neurodevelopment: Fetal Alcohol Syndrome</li> </ul>	Chapter 9
	Wednesday, Jan 14	<b>Development of the Nervous System</b> <ul style="list-style-type: none"> <li>• Disorders of neurodevelopment: Autism</li> </ul>	Chapter 9
	Friday, Jan 16	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Causes of brain damage</li> </ul>	Chapter 10
<b>WEEK 3</b>	Monday, Jan 19	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Rehabilitation and recovery – Part 1</li> </ul>	Chapter 10
	Wednesday Jan 21	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Rehabilitation and recovery – Part 2</li> </ul>	Chapter 10
	Friday, Jan 23	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Neurological diseases: Epilepsy</li> </ul>	Chapter 10
<b>WEEK 4</b>	Monday, Jan 26	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Neurodegenerative diseases: Parkinson's disease</li> </ul>	Chapter 10
	Wednesday Jan 28	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Neurodegenerative diseases: Alzheimer's</li> </ul>	Chapter 10
	Friday, Jan 30	<b>Brain Damage and Neuroplasticity</b> <ul style="list-style-type: none"> <li>• Neurodegenerative diseases: Huntington's</li> </ul>	Chapter 10
<b>WEEK 5</b>	<b>Monday, Feb 2</b>	<b>MID-TERM EXAM 1 – BRAIN PLASTICITY</b>	<b>Chapters 9/10</b>

<b>SECTION 2 – MOTIVATED BEHAVIOURS</b>			
<b>WEEK 5</b>	Wednesday, Feb 4	<b>Hunger, Eating, and Health:</b> <ul style="list-style-type: none"> <li>• Digestion and energy flow</li> </ul>	Chapter 12
	Friday, Feb 6	<b>Hunger, Eating, and Health:</b> <ul style="list-style-type: none"> <li>• Hunger and satiety</li> </ul>	Chapter 12
<b>WEEK 6</b>	<b>Monday, Feb 9</b>	<b>Hunger, Eating, and Health:</b> <ul style="list-style-type: none"> <li>• Understanding obesity</li> </ul>	
	Wednesday, Feb 11	<b>Hunger, Eating, and Health:</b> <ul style="list-style-type: none"> <li>• Eating disorders: anorexia</li> </ul>	Chapter 12
	Friday, Feb 13	<b>Hormones and Sex</b> <ul style="list-style-type: none"> <li>• The neuroendocrine system</li> </ul>	Chapter 13
<b>(Feb 16 – 20) – FAMILY DAY &amp; READING WEEK</b>			
<b>WEEK 7</b>	Monday, Feb 23	<b>Hormones and Sex</b> <ul style="list-style-type: none"> <li>• Hormones and sexual development</li> </ul>	Chapter 13
	Wednesday, Feb 25	<b>Hormones and Sex</b> <ul style="list-style-type: none"> <li>• Neural regulation of sexual behavior</li> </ul>	Chapter 13
	Friday, Feb 27	<b>Sleep, Dreaming, and Circadian Rhythms:</b> <ul style="list-style-type: none"> <li>• Sleep, learning and memory</li> </ul>	Chapter 14
<b>WEEK 8</b>	Monday, March 2	<b>Sleep, Dreaming, and Circadian Rhythms:</b> <ul style="list-style-type: none"> <li>• The circadian clock</li> </ul>	Chapter 14
	Wednesday, March 4	<b>Sleep, Dreaming, and Circadian Rhythms:</b> <ul style="list-style-type: none"> <li>• Sleep and the glymphatic system</li> </ul>	Chapter 14
	Friday, March 6	<b>Sleep, Dreaming, and Circadian Rhythms:</b> <ul style="list-style-type: none"> <li>• Sleep disorders</li> </ul>	Chapter 14
<b>WEEK 9</b>	<b>Monday, March 9</b>	<b>MIDTERM EXAM II – MOTIVATED BEHAVIOURS</b>	<b>Chapters 12/13/14</b>

<b>SECTION 3 – REWARD, ADDICTION, EMOTION AND PSYCHOPATHOLOGY</b>			
<b>WEEK 9</b>	Wednesday, March 11	<b>Drug Addiction and the Brain’s Reward Circuits</b> <ul style="list-style-type: none"> <li>Principles of drug action, tolerance and withdrawal</li> </ul>	Chapter 15
	Friday, March 13	<b>Drug Addiction and the Brain’s Reward Circuits</b> <ul style="list-style-type: none"> <li>Biopsychological theories of addiction</li> </ul>	Chapter 15
<b>WEEK 10</b>	Monday, March 16	<b>Drug Addiction and the Brain’s Reward Circuits</b> <ul style="list-style-type: none"> <li>Chronic drug abuse-induced changes in brain</li> </ul>	Chapter 15
	Wednesday, March 18	<b>Biopsychology of Emotion, Stress, and Health:</b> <ul style="list-style-type: none"> <li>HPA axis, stress and the hippocampus</li> </ul>	Chapter 17
	Friday, March 20	<b>Biopsychology of Emotion, Stress, and Health:</b> <ul style="list-style-type: none"> <li>Individual differences in sensitivity to stress</li> </ul>	Chapter 17
<b>WEEK 11</b>	Monday, March 23	<b>Biopsychology of Emotion, Stress, and Health:</b> <ul style="list-style-type: none"> <li>Fear conditioning and the amygdala</li> </ul>	Chapter 17
	Wednesday, March 25	<b>Biopsychology of Emotion, Stress, and Health:</b> <ul style="list-style-type: none"> <li>The brain and human emotion</li> </ul>	Chapter 17
	Monday, March 30	<b>Biopsychology of Psychiatric Disorders:</b> <ul style="list-style-type: none"> <li>Neurobiology of depression – part 1</li> </ul>	Chapter 18
<b>WEEK 12</b>	Monday, March 30	<b>Biopsychology of Psychiatric Disorders:</b> <ul style="list-style-type: none"> <li>Neurobiology of depression – part 2</li> </ul>	Chapter 18
	Wednesday, April 1	<b>Biopsychology of Psychiatric Disorders:</b> <ul style="list-style-type: none"> <li>Schizophrenia: Part 1- neurodevelopmental theory</li> </ul>	Chapter 18
	Friday, April 3	<b>Good Friday</b>	
	Monday, April 6	<b>Biopsychology of Psychiatric Disorders:</b> <ul style="list-style-type: none"> <li>Schizophrenia: Part 2 - dopaminergic theory</li> </ul>	Chapter 18

## Queen's Policy Statement on Academic Integrity

Queen's University is dedicated to creating a scholarly community free to explore a range of ideas, to build and advance knowledge, and to share the ideas and knowledge that emerge from a range of intellectual pursuits. Queen's students, faculty, administrators and staff therefore all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility and by the quality of courage. These values and qualities 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.

The following statements from "The Fundamental Values of Academic Integrity" (2nd edition), developed by the International Center for Academic Integrity (ICAI), contextualize these values and qualities:

1. **Honesty** Academic communities of integrity advance the quest for truth and knowledge through intellectual and personal honesty in learning, teaching, research, and service.
2. **Trust** Academic communities of integrity both foster and rely upon climates of mutual trust. Climates of trust encourage and support the free exchange of ideas which in turn allows scholarly inquiry to reach its fullest potential.
3. **Fairness** Academic communities of integrity establish clear and transparent expectations, standards, and practices to support fairness in the interactions of students, faculty, and administrators.
4. **Respect** Academic communities of integrity value the interactive, cooperative, participatory nature of learning. They honor, value, and consider diverse opinions and ideas.
5. **Responsibility** Academic communities of integrity rest upon foundations of personal accountability coupled with the willingness of individuals and groups to lead by example, uphold mutually agreed-upon standards, and take action when they encounter wrongdoing.
6. **Courage** To develop and sustain communities of integrity, it takes more than simply believing in the fundamental values. Translating the values from talking points into action -- standing up for them in the face of pressure and adversity — requires determination, commitment, and courage.

Students are responsible for familiarizing themselves with and adhering to the Senate [regulations](#) concerning academic integrity, along with [Faculty or School](#) specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

Queen's [Student Academic Success Services](#) (SASS) offers a self-directed, online academic integrity module which we encourage all students to take which will help with:

- Understanding the nature of the academic integrity departure
- Understanding the expectations of and role of sources in scholarly writing
- Integrating sources into your writing (paraphrasing, quoting, summarizing)
- Understanding when and how to cite your sources
- Managing your time effectively to avoid the need for shortcuts
- Taking effective notes to ensure accuracy of source material and correct attribution

**COPYRIGHT OF COURSE MATERIAL**

Course materials created by the course instructor, including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor. It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's express consent. A student who engages in such conduct may be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.



*Let us acknowledge that Queen's University occupies traditional Anishinaabe and Haudenosaunee territory. To acknowledge this traditional territory is to recognize its longer history, one predating the establishment of the earliest European colonies. It is also to acknowledge this territory's significance for the Indigenous Peoples who lived, and continue to live, upon it and whose practices and spiritualities are tied to the land and continue to develop in relationship to the territory and its other inhabitants today. Indigenous communities in Kingston/Katarokwi continue to reflect the area's Anishinaabe and Haudenosaunee roots. There is also a significant Métis community and First Peoples from other Nations across Turtle Island present here today. To read more about the history of the land, see the [Queen's Encyclopedia](#) and to learn more about land acknowledgements, see the [Office of Indigenous Initiatives](#).*