

Psychology 304 – Brain and Behaviour

Section 98A – May to August 2021

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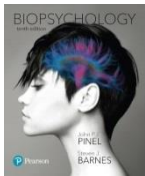
Please note that this section of Psychology 304 is offered via UBC Distance Learning using the e-learning site Canvas for the course platform. There are no lectures in this section of PSYC 304.

You can contact the instructor and the TA via email or via the course website discussion forums in Canvas.

Course Overview

Welcome to Psychology 304 – Brain and Behaviour. The study of the human brain and how it relates to behaviour is a fascinating field, and I hope that you will enjoy the journey upon which we are about to embark.

Course Materials



Required Textbook

Pinel and Barnes (2018). Biopsychology. Pearson. 10th edition in Revel.

Approx. cost \$80 plus tax.

Calendar description

PSYC 304 (6 credits) Brain and Behaviour

The neurobiological bases of behaviour; brain processes involved in perception, motivation, emotion, psychopathology, learning and memory. Open to all Arts and Science majors except those in the B.Sc. Psychology program. Credit will not be given for both PSYC 304 and PSYC 360.

Prerequisite: Either (a) PSYC 100 or (b) two of PSYC 101, PSYC 102, PSYC 205, PSYC 207, PSYC 208, PSYC 216, PSYC 217. Strongly recommended: PSYC 101 and PSYC 216 or 217 or 260.

Course objectives

This course provides an overview of the relationship between the brain and behaviour. Coverage will span a range of topics including neuroanatomy, neurochemistry, psychopharmacology, neuroendocrinology, vision and hearing, sleep and circadian rhythms, reproductive and ingestive behaviour, and learning and memory in both humans and non-human species. There will also be a focus on human neurological and mental disorders including Alzheimer's disease, schizophrenia, and depression.

After completing the course, students will be able to:

- Describe the field of biopsychology and how it fits with other fields that involve studying of the brain and behavior.
- Identify the functions of a full range of brain structures and neurotransmitters.
- Be able to identify the functions of different types of brain cells and explain how neurons send and receive signals.
- Describe the research methods most commonly used in biopsychology.
- Understand the impact of a range of neurotransmitters, hormones and psychoactive drugs on the behaviour of humans and other species.
- Describe the potential outcome of damage to nervous system structures.
- Be able to explain how the brain is involved in the regulation of our sensory and motor systems.
- Understand how the brain is involved in a range of behaviours including learning and memory, eating, sex, sleep, aggression and drug use.
- Describe brain involvement in a range of human neurological and mental disorders including Alzheimer’s disease, schizophrenia and depression

Overview of Readings and Activities

This course is divided into six modules as indicated in the table below.

Unit	Readings	Activities*
Module 1 – Introduction	Online- Introduction section	Discussion 1
Module 2 - Basic Concepts	Chapters 1, 2, 3, 4 and 5 + online Neuroendocrinology readings	Discussions 2, 3 and 4
Module 3 – Sensory and Motor Systems	Chapters 6, 7 and 8	Written Assignment 1 Discussion 5
Module 4 - Brain Damage, Psychiatric Disorders and Emotions	Chapters 10, 18 and 17	Discussions 6 and 7 Written Assignment 2
Module 5 - Biopsychology of Learning, Hunger, Addiction, Sex and Sleep	Chapters 11, 12, 15, 13 and 14 + online Hormones and Sexual Behaviour readings	Discussions 8 and 9
Module 6 – Preparing for the Final Exam	Online - Preparing for the Final Exam section	Final Examination (Online using the LockDown Browser)

***Refer to the Course Schedule for dates.**

Course Grading

Your grade in the course will be based on your performance on two written assignments, participation in scheduled online discussions and a final examination.

Graded Assignments

There are two written assignments due on specific dates. See the Assignment Information section on the course website for more information and refer to the Course Schedule for the specific due dates.

Assignment 1 is worth 19% of your grade and Assignment 2 is worth 24% of your grade.

If a student is unable to submit an assignment due to medical reasons, the assignment will be waived and the weight of the final examination increased accordingly. There are strict late penalties for overdue assignments (10% deduction per day late). Assignments more than five days late will not be accepted and a score of zero assigned. You are expected to manage your time accordingly – if you believe that an assignment due date is at a busy time for you (e.g., during a time when other examinations or assignments are scheduled), then you should submit your assignment earlier.

Scheduled Online Discussions

There will be nine scheduled online discussions held during specific dates.

Participation in Discussion 1 is worth 1%. For all remaining discussions (Discussions 2-9) participation in each scheduled discussion is worth 2%. Your posting may be awarded a 2/2 (good), a 1/2 (OK but could have put more thought or effort into it) or a 0/0 (poor or no posting made during the scheduled time).

Refer to the Course Schedule for the dates that these discussions are scheduled. You will not receive points for posting before or after these dates. The topic for each discussion will be posted in the discussion forum just prior to the start of the scheduled time for discussion.

Participation in scheduled online discussions is worth 17% of your course grade.

Final Examination

The final exam is a mixture of multiple choice, fill-in-the-blanks, and short answer questions. Please see the section on the course website called Preparing for the Final Exam which provides detail about the final examination plus a practice examination which is similar in format and difficulty to the actual final examination.

This course will use the LockDown Browser for delivering the final exam online. For more information about the LockDown Browser including technical requirements for your computer, please see <https://lthub.ubc.ca/guides/lockdown-browser-student-guide/>

IMPORTANT: You will be permitted to refer to your own personal notes during the writing of the final exam. So part of your strategy in studying for the exam will be to take very good notes. Your notes must be physical hard copies (i.e., on paper) – and can be either handwritten or typed. You may NOT use any device to refer to digital copies of your notes (i.e., you can't look at your notes on a phone or tablet). You will NOT be allowed to refer to your textbook or look up information on the Internet while taking the exam. You are ONLY allowed to refer to your own notes.

The final examination comprises 40% of your course grade.

Calculation of Final Grade

The following weightings will be used in calculating your final grade.

Assignment 1	19%
Assignment 2	24%
Discussions	17%
Final Examination	40%
	100%

Important Policies

Grade Distribution

ADJUSTED DEPARTMENTAL SCALING POLICY FOR 2021S

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology classes are required to comply with departmental norms regarding grade distributions. However, in the spirit of flexibility and compassion in light of COVID-19 and the associated pivoting to online teaching, those departmental norms have been adjusted upwards by 5% for only 2020W and 2021S. According to these adjusted norms, the average grade in 100- and 200-level Psychology classes will be 72 for an exceptionally strong class, 70 for an average class, and 68 for a weak class, with a standard deviation of 14. The corresponding figures for 300- and 400-level classes will be 75, 73, and 71, with a standard deviation of 13. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by an instructor or the department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+ 90-100%	C+ 64-67%
A 85-89%	C 60-63%
A- 80-84%	C- 55-59%
B+ 76-79%	D 50-54%
B 72-75%	F 0-49%
B- 68-71%	

Academic Concession

For course policies regarding in-term academic concessions, please refer to the relevant UBC calendar entry: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0>

Plagiarism

Psychology Department's Position on Academic Misconduct

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. In the first place, the Department has implemented software that can reliably detect cheating on multiple-choice exams by

analyzing the patterns of students' responses. In addition, the Department subscribes to TurnItIn--a service designed to detect and deter plagiarism. Materials (term papers, lab reports, etc.) that students submit for grading will be scanned and compared to over 4.5 billion pages of content located on the Internet or in TurnItIn's own proprietary databases. The results of these comparisons are compiled into customized 'Originality Reports' containing several, sensitive measures of plagiarism; instructors receive copies of these reports for every student in their class.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. The University of British Columbia has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.

All graded work in this course, unless otherwise specified, is to be original work done independently by individuals. If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. If you are uncertain as to what is considered plagiarism in general, please see the UBC Guide to Academic Integrity at <http://learningcommons.ubc.ca/resource-guides/avoid-plagiarism/>

In general, please do not "cut and paste" material from the Internet into an assignment or copy from journal articles or books or another student's work and claim the material as your own. The words you use must be your own words. Be careful to always provide in-text citations and references when citing a source.

University Values

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available at - <https://senate.ubc.ca/policies-resources-support-student-success>.

Copyright

All materials of this course (course handouts, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

Issues for Students Studying Abroad and Remotely

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject

to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you.

UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit - <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0> - for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom). Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: <http://academic.ubc.ca/support-resources/freedom-expression>

Two Indispensable Links

1. **UBC Distance Learning – Learner Support** - <http://distancelearning.ubc.ca/learner-support/>

Once you have finished reading this introduction, please take some time to read over the Learner Support information. Here you will also find important information on policies and procedures (e.g., withdrawals, extensions) and key contacts.

2. **UBC Library** - <http://www.library.ubc.ca/>

Your assignment will require you to do a literature search. The best place to do these literature searches and obtain copies of articles is through the UBC Library website. If you are not familiar with how to do literature searches using a database such as Medline, see the help available via the UBC Library website or ask a UBC librarian in person. The UBC Library has a lot of other useful information such as how to cite references (using APA style) and avoid plagiarism.

Please take some time reviewing the information and resources available on both of these websites.

PSYC 304 - Course Schedule

Follow the suggested timeline for your readings and take particular note of the dates for the scheduled discussions and due dates for assignments (highlighted in yellow).

Dates	Text Readings	Online Readings	Requirements
MODULE 1 - Introduction			
May 10-13		Introduction	
Postings for Discussion 1 must be made between May 14-18			Discussion 1
MODULE 2: Basic Concepts			
May 19-June 11	Chapter 1. Biopsychology as a Neuroscience Chapter 2. Evolution, Genetics, and Experience Chapter 3. Anatomy of the Nervous System Chapter 4. Neural Conduction and Synaptic Transmission Chapter 5. The Research Methods of Biopsychology	Neuroendocrinology	
Postings for Discussion 2 must be made between May 25-28			Discussion 2
Postings for Discussion 3 must be made between June 1-4			Discussion 3
Postings for Discussion 4 must be made between June 8-11			Discussion 4
MODULE 3: Sensory and Motor Systems			
June 12-29	Chapter 6. The Visual System Chapter 7. Mechanisms of Perception Chapter 8. The Sensorimotor System		
Your Written Assignment 1 is due June 21 (before midnight)			Written Assignment 1 Due
Postings for Discussion 5 must be made between June 24-28			Discussion 5

MODULE 4: Brain Damage, Psychiatric Disorders and Emotions

June 29-July 21	Chapter 10. Brain Damage and Neuroplasticity Chapter 17. Biopsychology of Emotion, Stress, and Health Chapter 18. Biopsychology of Psychiatric Disorders		
Postings for Discussion 6 must be made between July 6-9			Discussion 6
Postings for Discussion 7 must be made between July 13-16			Discussion 7
Your Written Assignment 2 is due July 21 (before midnight)			Written Assignment 2 Due

MODULE 5: Biopsychology of Learning, Hunger, Addiction, Sex and Sleep

July 22-August 6	Chapter 11. Learning, Memory, and Amnesia Chapter 12. Hunger, Eating, and Health Chapter 15. Drug Use, Drug Addiction, and the Brain's Reward Circuits Chapter 14. Sleep, Dreaming, and Circadian Rhythms Chapter 13. Hormones and Sex	Hormones and Sexual Behaviour	
Postings for Discussion 8 must be made between July 27-30			Discussion 8
Postings for Discussion 9 must be made between August 3-6			Discussion 9

MODULE 6 - Preparing for the Final Exam

August 7 to the scheduled date of final exam.		Preparing for the Final Exam	
As scheduled by UBC during the August 2021 exam period (August 16-20 inclusive)			Final Examination