

Topics in Human Brain and Behaviour (PSYD66H3 S LEC30)

Winter 2021 Course Syllabus

Instructor: Laura Heath, M.Sc., M.A.

Class Time: Tuesdays 7pm – 9pm

Class Location: Zoom Link: <https://utoronto.zoom.us/j/88011261521> Passcode: **336961**

Course Email: psyd66.winter2021@gmail.com

Virtual Office Hours: By appointment only: <https://calendly.com/l-heath>

Office Location: Zoom link will be sent to student via email prior to scheduled meeting time

Prerequisites: [PSYB55H3 or PSYB56H3] and [0.5 credit at the C-level in PSY or NRO courses] and [PSYB01H3 or PSYB04H3 or PSYB70H3] and [PSYB07H3 or STAB22H3 or STAB23H3]

Exclusion: PSY490H

Course Description: This course will provide an examination of selected topics in human brain and behaviour. Topics to be discussed may include neural bases of mental functions such as language, learning, memory, emotion, and addiction. The course will employ a seminar style of teaching in which students are expected to actively participate in their own learning.

Course Goals: Through this course, participants will gain a broad understanding of the neurobiological bases of behaviour through application to neurological and psychiatric disorders, as well as everyday functions such as sleep and stress. Students will develop critical thinking skills and gain experience in the review and development of research ideas in neuropsychology.

Learning Objectives: At the conclusion of this course, participants will be able to:

1. Demonstrate knowledge of current topics in brain and behaviour through in-class discussion and written assignment
2. Develop and write a research proposal that demonstrates critical understanding and reflection of a relevant topic
3. Critically evaluate and provide peer review of student research proposals
4. Articulate your response to feedback on your research proposal
5. Give presentations to disseminate knowledge, foster understanding, and generate discussion on relevant neuropsychological clinical and research topics

Learning Resources: There is no required textbook for this course. Required readings based on the selected topics will be provided on Quercus. It is expected that students read each week's required articles before class and come to the lecture prepared for discussion.

PSYD66H3 S LEC30 Winter 2021 Course Schedule

Week	Date	Topic
1	Jan 12	Introduction to course
2	Jan 19	How to write a research proposal
3	Jan 26	Language - Aphasias
4	Feb 2	SIGN-UP FOR PRESENTATIONS Memory – Optogenetic techniques that suggest a new theory of memory
5	Feb 9	Dementias
6	Feb 16	Reading Week – No Class
7	Feb 23	Vascular supply and stroke
8	Mar 2	STUDENT PRESENTATIONS ASSIGNMENT 1 DUE – RESEARCH PROPOSAL
9	Mar 9	STUDENT PRESENTATIONS
10	Mar 16	STUDENT PRESENTATIONS
11	Mar 23	STUDENT PRESENTATIONS ASSIGNMENT 2 DUE – PEER REVIEW
12	Mar 30	STUDENT PRESENTATIONS
13	Apr 6	STUDENT PRESENTATIONS ASSIGNMENT 3 DUE – RESPONSE TO REVIEWERS

Please note that this outline is subject to change depending on the needs of the class. Any changes to the syllabus will be announced in class and on Quercus at least one week before.

Selected Topics for Student Presentations

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Basal Ganglia: Tourette's Syndrome, Huntington's Disease, Parkinson's Disease 2. Multiple Sclerosis 3. Sleep 4. Attention and Consciousness: Attention Deficit Hyperactivity Disorder 5. Mood Disorders 6. Autism Spectrum Disorder 7. Mild cognitive impairment 8. Schizophrenia 9. Exercise 10. Stress 11. Addiction | <ol style="list-style-type: none"> 12. Sex differences in the brain 13. Cranium, ventricles, and meninges: Brain tumour, hydrocephalus, intracranial hemorrhage 14. Lateralization 15. Diet; Nutritional deficiencies (e.g., thiamine, vitamin B12, niacin, folic acid deficiencies) 16. Motor Neuron Disease 17. Traumatic Brain Injury 18. Higher-order visual processing: Cortical blindness; prosopagnosia; Balint's syndrome 19. Anxiety disorders |
|---|---|

Course Evaluation

Presentation (25%)

Research Proposal (25%)

Peer Review (10%)

Response to Reviewers (10%)

Reflection Questions (18%)

Participation (12%)

All written assignments should be formatted according to the *Publication Manual of the American Psychological Association (7th Edition)*.

Research Proposal (25%) – DUE MARCH 2

Students will devise and submit a research proposal on any topic within the field of human brain and behaviour. The research proposal may be inspired by class content (e.g., questions that were sparked during class discussion or based on your student presentation topic) or may be something not discussed in class. Students should discuss their research idea with the instructor at least one week prior to the deadline. This assignment is intended to allow students to build skills in grant writing (an integral part of graduate studies and research-oriented careers) and will parallel the research proposal guidelines for the Canada Graduate Scholarship Master's Award. The research proposal should be realistic/feasible and contribute important knowledge to the chosen field. The following components are required:

- 1) Title that reflects the proposed research
- 2) Background information to provide rationale that positions your proposed research within the context of the current knowledge in the field
- 3) Aims/Objectives – What the study aims to achieve
- 4) Hypotheses
- 5) Experimental Design
- 6) Measures
- 7) Data Analysis
- 8) Implications - What is the significance of the proposed research to the field?

The research proposal should be a maximum of 5 pages, excluding references, double spaced.

Peer Review (10%) – DUE MARCH 23

Students will review and provide feedback on the research proposals of two of their peers (maximum 2 pages, double spaced, per peer review). The instructor will evaluate the feedback given to peers. Feedback should focus on the subject knowledge, research idea, study design, and writing. Questions to consider during peer review may include:

- 1) Is the research scientifically valid, significant and original?
- 2) How strong is the rationale? Does it fill a knowledge gap? Is the research idea adequately presented as novel? Does it convincingly demonstrate its importance to the field?
- 3) Is the study feasible?
- 4) Is the study design appropriate? Optimal to test the hypotheses?
- 5) What are the strengths and weaknesses?
- 6) Are there any ethical issues?
- 7) Is the writing free of jargon and easy to understand for a general scientific audience?

Response to Reviewers (10%) – DUE APRIL 6

Students will submit a written, formal response to peer review, which will address the concerns of the reviewers. This allows practice of another skill that is required in graduate school and beyond, particularly during the process of manuscript submission for journal publication. This should be a maximum of 2 pages, double spaced.

Presentation (25%)

Student presentations will take place over the last 6 lectures of the course. Presentations will be delivered in pairs, with each pair presenting on a chosen topic for 50 minutes total, with 30-40 minutes devoted to presentation time (about 15-20 minutes per student) and 10-20 minutes allotted for discussion. Students will be presenting on a pre-approved topic (see list of Selected Topics on p.2 for ideas). It is the students' responsibility to decide with their partner how they would like to allocate responsibilities within the presentation. Each student will be graded separately. Generally, it will be important to include a background/introduction to the topic (e.g., relevant neuroanatomical structures and their primary functions), brain mechanisms that explain the behaviour, potential avenues of treatment and their mechanisms, and some interesting research on the topic (e.g., novel/recent/interesting study, novel therapeutic technique).

At the end of the 30-40-minute presentation, the presenters will lead the class in a discussion for approximately 10-20 minutes. Presenters will be asked to prepare a set of 2-3 discussion questions in advance to provoke group exploration of the chosen topic. Presenters should assign 1 reading per pair to their fellow students ahead of time. **These readings should be provided to the class at least one week in advance** so that all students have a chance to prepare.

Presentation slides (in PDF format) should be sent to the instructor the morning of the presentation, Tuesday by 9:00AM EST. Grades will be based on the students' ability to select and describe relevant theoretical, clinical, and research material, and the facilitation of thought-provoking and relevant discussion on the chosen topic. Sign-ups for time slots and topics will take place in class on February 2.

Reflection Papers (3% each week; select 6 weeks for a total of 18%)

Students are required to choose 6 classes to submit reflection papers related to that week's readings. The paper can consist of discussion questions for class, critique of an article's study methodology or interpretation of findings, or broader reflection of the topic (e.g., applications in clinical practice, cultural considerations, ethical issues, new frontiers or hypotheses). Students will be graded on their demonstration of critical thinking of the week's readings; this cannot just be a study summary. Students must submit 3 reflection papers from Weeks 3-7 and 3 reflection papers during student presentations (Weeks 8-13). Papers should be approximately 1 page, double-spaced and are due each **Tuesday by 9:00am EST before each seminar**, as indicated on Quercus. Your reflections will often provide the basis for in-class discussion.

Participation (12%)

In line with a seminar-style course, students will be graded throughout the semester on their overall engagement in the discussion part of each lecture. Students are highly encouraged to ask questions, seek clarifications, synthesize information, and contribute meaningfully to the discussion as much as possible! You do not need to try to speak up every single class so that you get the marks; it is more about contributing when you have something thoughtful to say. Students

are also expected to demonstrate respectful, active listening when peers are contributing to the discussion. Part of your participation grade will reflect your ability to explain and incorporate others' thoughts as well as your own. Active discussion that fosters critical thinking is a cornerstone of academia! Take advantage of this seminar-style course to learn and engage with your peers.

Students who cannot contribute to the discussion in class (e.g., poor internet connection, unable to attend live lecture) should contribute to the discussion of that week's seminar by submitting a written response to the following two questions: 1) What was the most interesting thing you heard during the discussion? 2) What two things might you have added to the discussion? Your response will be due by email by the next **Tuesday, 9:00am EST** following the class that you missed.

How to Succeed in this Course

Engagement and participation are essential to the learning process. If you read the assigned articles carefully, provide thoughtful reflection papers, contribute to discussions, and invest time in your writing, you are likely to do well. It is important to keep up with your reading – I expect you to complete all of the assigned reading.

Please do not hesitate to **schedule an appointment with me** if you are experiencing difficulty with the course, want to check in about your presentation, assignments, class participation, or have any concerns. Do not wait until the end of the course to reach out, as I cannot help you effectively at the last minute.

Policies for this Course Regarding Grading and Late Assignments

Grading: Any complaint about grading on any course evaluation should be made in writing to the instructor (via psyd66.winter2021@gmail.com) within one week of receiving the graded material and should detail the point of contention.

Late Coursework: If you do not have legitimate documentation for a late assignment, 10% of the total value of the assignment will be deducted for each late day. If you provide legitimate documentation for your late assignment (see policies on *Missed Term Work* below), you must contact the instructor (via psyd66.winter2021@gmail.com) within one week of the missed assignment deadline (or as soon as is reasonably possible) to discuss a new deadline for your late assignment(s). Please take note of the last day for submission of term assignments in this course (April 12, as set by the Registrar). If you wish to submit work to be graded beyond the last day for submission of term assignments, you must contact the Registrar's office to submit a petition (this is beyond the instructor's control).

General Course Policies and Guidelines

Equity, Diversity, and Inclusion: The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Sharing Personal Information: The relationship with your peers and instructors is academic in nature and does not constitute a therapeutic relationship. Information that the instructor may share regarding clinical experience is for teaching purposes only.

Most people have experienced a mental health issue or know someone who has experienced a mental health issue at some point in their lives. With this in mind, please understand that this classroom setting is not the best environment to share your personal experiences or to offer specific information about someone you know. Please aim to maintain professional boundaries during the course, as well as be sensitive and courteous to others. If you are in need of mental health support, see the **Mental Health Resources** section of the syllabus below.

Quercus: All course-related materials and announcements will be posted to Quercus. All assignments should be submitted through Quercus. It is each student's responsibility to check the course website frequently and monitor their University of Toronto email address regularly.

Emails: Please use the course email (psyd66.winter2021@gmail.com) for all questions. I will try to answer your emails **within 3 business days** unless you receive an automatic reply that suggests otherwise. Please keep your emails professional, concise, and clear; start with an informative title that includes a description of your question (e.g., "Question about case conceptualization assignment"). It is helpful if you use your University of Toronto email, as well as write your name so I know who you are. For more information about writing academic emails, you may find this resource helpful: <https://goo.gl/ik1iw7>

Virtual Office Hours: Office hours will be by appointment only, using the following link: <https://calendly.com/l-heath>. You will receive a Zoom link when you book your Calendly appointment. Please check your email to confirm ahead of time and cancel the booking if you cannot attend.

Course Materials & Audio/Video Recording: For reasons of privacy as well as protection of copyright, unauthorized video or audio recording in classrooms is prohibited. This is outlined in the Provost's guidelines on *Appropriate Use of Information and Communication Technology*.

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor. For questions about the recording and use of videos in which you appear, please contact your instructor.

Syllabus Changes: I may make minor changes to the course syllabus based on pacing and needs of the class, or other unexpected events. These will not impair your ability to succeed in the class and I will notify you of any changes in class and through a Quercus announcement at least one week before. Any major grading/content changes will be contingent on class vote.

Mental Health Resources: If you feel that you need to seek help for yourself or someone you care about, you may wish to contact the Toronto Distress Centre (416-408-4357), Good2Talk (866-925-5454), or UTSC Health and Wellness Centre. For a list of other crisis resources, see <https://www.camh.ca/en/health-info/crisis-resources>

ConnexOntario provides free and confidential health services information for people experiencing problems with alcohol and drugs, gambling, or other mental health issues by connecting them with services in their area. You can contact them 24/7 at 1-866-531-2600.

The UTSC Health and Wellness Centre is currently providing virtual same day counselling, nursing, and doctor appointments by contacting 416-287-7065. If you do not reach someone live, please leave a message and a team member will return your call as soon as possible. Or email health-services@utsc.utoronto.ca to request an appointment.

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor in all relevant courses, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated by following procedures outline in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources (e.g., <https://www.academicintegrity.utoronto.ca/>).

Student Resources

AccessABILITY Services: The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs.

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Call 416-287-7560 or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals.

Writing Centre: The UTSC Writing Centre works with students at all stages of assignment development: from brainstorming and developing an outline to constructing introductions, body paragraphs and conclusions, to citation, referencing, editing and proofreading. They offer individual consultations as well as writing groups, workshops and clinics. Please see the website for more details: <https://www.utsc.utoronto.ca/twc/one-one-tutoring>

Grade Scale

NUMERICAL MARKS	LETTER GRADE	GRADE POINT VALUE
90 - 100%	A+	4.0
85 - 89%	A	4.0
80 - 84%	A-	3.7
77 - 79%	B+	3.3
73 - 76%	B	3.0
70 - 72%	B-	2.7
67 - 69%	C+	2.3
63 - 66%	C	2.0
60 - 62%	C-	1.7
57 - 59%	D+	1.3
53 - 56%	D	1.0
50 - 52%	D-	0.7
0 - 49%	F	0.0

Psychology Department Missed Term Work Policy, WINTER 2021

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedures outlined below.

Notes:

- The following reasons are not considered sufficient for missed term work: travel for leisure, weddings, personal commitments, work commitments, human error.
- Missed Final Exams are handled by the Registrar's Office and should be declared on eService: <http://www.utoronto.ca/registrar/missing-examination>
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, you would need to file a petition with the Registrar's Office: <https://www.utoronto.ca/registrar/term-work>

Accommodations for Illness or Emergency:

For missed work due to ILLNESS OR EMERGENCY, please complete the following **two-step** process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>) and email it to Keely Hicks at keely.hicks@utoronto.ca ,
and
2. **Declare your absence** on [ACORN](#) (Profile & Settings > Absence Declaration)

Deadline: You must complete the above steps **within 3 business days** of the missed work.

Note: For this semester, we do not require any additional supporting documentation (ex. medical notes) to support your missed term work accommodation request.

Accommodations for Academic Conflicts:

For missed term work due to an ACADEMIC CONFLICT (i.e. two quizzes or tests scheduled at the same time), please complete the following process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>), choosing "Other" as your reason for missed work and explaining the conflict in the space provided.
2. Take screenshots of your course homepages that demonstrate the conflict.
3. Email the form and screenshots to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **at least two weeks (10 business days) before the date of the activity**, or as soon as possible if it was not possible to identify the conflict earlier.

Note: Multiple assignments due on the same day are not considered conflicts. Accommodations may only be possible in the case of quizzes and tests that are both scheduled during the same discrete period. Back-to-back tests/quizzes are not considered conflicts.

Note: Students are responsible for keeping their course timetables conflict-free. Students who choose to register in two synchronous courses with overlapping lecture/tutorial/lab schedules may not necessarily be accommodated.

Accommodations for Religious Conflicts:

For missed term work due to a RELIGIOUS CONFLICT, please complete the following process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>), choosing “Other” as your reason for missed work and noting “Religious conflict” in the space provided.
2. Email the form to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **at least two weeks (10 business days) before the date of the activity**, or as soon as possible if it was not possible to identify the conflict earlier.

Accommodations for Time Zone Conflicts:

If you are physically in a different time zone and a quiz or midterm is scheduled outside of 7:00am to midnight in your local time, please complete the following process:

1. Complete the **Time Zone Conflict Form** (<https://uoft.me/PSY-TimeZone>), and
2. Email the form to Keely Hicks (keely.hicks@utoronto.ca)

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **at least two weeks (10 business days) before the date of the activity**, or as soon as possible, if it was not possible to identify the conflict earlier.

Accommodations for Students Registered with AccessAbility Services:

For missed **TERM TESTS** due to ACCESSABILITY REASONS:

- **Contact your AccessAbility consultant** and have them email Keely (keely.hicks@utoronto.ca) detailing accommodations required.

For missed **ASSIGNMENTS** due to ACCESSABILITY REASONS:

- If your desired accommodation is **within the scope** of your Accommodation Letter (ex. your letter includes “extensions of up to 7 days” and you need 3 days):
 1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>).
 2. Email the form and your **Accommodation Letter** to Keely Hicks (keely.hicks@utoronto.ca).
- If your desired accommodation is **outside the scope** of your Accommodation Letter (ex. your letter includes “extensions of up to 7 days” but you need more time than that):
 1. **Contact your AccessAbility consultant** and have them email Keely Hicks (keely.hicks@utoronto.ca) detailing the accommodations required.

After submitting your documentation:

Within approximately one to five business days, you will receive a response from your instructor detailing the accommodations to be made (if any).

You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

You should continue to work on your assignments to the best of your ability, as extension accommodations may be as short as one business day, depending on the nature of the illness/emergency.

If an accommodation has been granted but you are unable to meet the conditions of the accommodation (ex. you need a longer extension, or you missed a make-up test), you will need to repeat the missed term work procedure and submit additional forms to request further accommodation. Note that in the case of a missed make-up test, an opportunity to write a second make-up test may not be provided.

Completion of this form does not guarantee that accommodations will be made. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.

Missed Accommodations

If an accommodation is granted but a continued illness/emergency prevents you from meeting the requirements of your accommodation, you must repeat the missed term work procedure to request additional accommodations.

(E.g.) If you miss a make-up midterm, you would need to submit another Request for Missed Term Work Accommodations form and declare your extended absence on ACORN.

Importance of Three Business Day window:

If you are unable to submit your documents within the three business day window, **you must email Keely (keely.hicks@utoronto.ca) within the three business day window** to explain the nature of the delay, and when you will be able to provide your documents. Exceptions to the documentation deadline will only be made under **exceptional circumstances**.

Questions?

If you have any questions about this Missed Term Work policy, please contact Keely Hicks (keely.hicks@utoronto.ca) **well before** the date of the test / assignment deadline to describe your circumstances and inquire about procedures.