PSY496H1F – Cognitive Dysfunction in Neurological Disorders

Fall 2023 Syllabus
Monday 2:00 pm - 5:00 pm; Sidney Smith 2105

Instructor:	Teaching Assistant:
Mavis Kusi	Arya Rahbarnia
mavis.kusi@utoronto.ca	arya.rahbarnia@mail.utoronto.ca
Office Hours:	**Office Hours:**
Thursdays 10:00 am – 11:00 am	By appointment (email the TA to arrange
Sidney Smith 4001	meetings)

COURSE READINGS

Schoenberg, M.R., & Scott, J.G. (2011). The little black book of neuropsychology. Springer. (e-book available at the U of T Library; the U of T Bookstore has a limited number of the book available for those who want to purchase a hard copy of the book).

Uysal, S. (2023). Functional neuroanatomy and clinical neuroscience: Foundations for understanding disorders of cognition and behavior. Oxford University Press. (e-book available at the U of T Library).

*Journal articles are also assigned for reading and will be posted on Quercus. Additional readings may be assigned later on and will also be available on Quercus.

COURSE DESCRIPTION, GOALS, PREREQUISITES

The course description, along with the prerequisites for the course, can be found at the following link: https://artsci.calendar.utoronto.ca/course/psy496h1.

Objectives

The primary objectives of this course are to:

1. Provide students with a strong theoretical framework for understanding the cognitive dysfunctions that are associated with neurological disorders. This will be accomplished by focusing on neuropsychological models and basic mechanisms that are compromised across disorders.
2. Provide students with the critical reasoning tools needed to evaluate biomedical findings in psychiatry, neurology, and the cognitive neurosciences. This will be accomplished by focusing on a limited number of disorders so that competing disease models and the empirical studies which evaluate them can be considered in depth.
3. Encourage students to generate new and creative tests that link existing disease models to cognitive behaviour. This will be accomplished through writing a detailed experiment proposal.

Prerequisites

One of: PSY201H1/ ECO220Y1/ EEB225H1/ GGR270H1/ IRW220H1/ POL222H1/ SOC202H1/ STA220H1/ STA238H1/ STA248H1/ STA288H1/ PSY201H5/ STA215H5/ STA220H5/ PSYB07H3/ STAB22H3/ STAB23H3/ STAB57H3

One of: (PSY270H1/ PSY270H5/ PSYB57H3/ COG250Y1)/(PSY290H1/ PSY290H5/ PSYB64H3/ HMB200H1/ PSL300H1)

It is your responsibility to ensure that you have met **all** prerequisites listed in the Psychology section of the A&S Calendar for this course. Visiting students from other universities should have the equivalent prerequisites from their home institutions. If you lack any prerequisites, you will be removed from this course. No waivers will be granted.

COURSE WEBSITE (QUERCUS)
Log in to the University's learning management system, Quercus (https://q.utoronto.ca) for the course website. Information about the course will be posted on this website. This includes course readings and other materials required to complete class activities and assignments. Important announcements and updates will also be posted on the course webpage. The site is dynamic and new information and resources will be posted regularly as we move through the term, so please make it a habit to log in to the site on a regular basis.

To access the course website, go to the U of T Quercus log-in page at https://q.utoronto.ca. Once you have logged in to Quercus using your UTORid and password, you should see the link or "card" for PSY496. You may need to scroll through other cards to find this. Click on the PSY496H1 F LEC0101 link to enter our course area, view the latest announcements, and access the course resources. There are Quercus help guides for students that you can access by clicking on the "?" icon on the left column.

SPECIAL NOTE ABOUT GRADES POSTED ON QUERCUS: Please note that any grades posted are for you to view and track your progress through the course. No grades are considered official, including any posted on Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

You are responsible for announcements posted to Quercus, so check this page regularly for updates.

COMMUNICATION
Email will be the primary way of communication with me and the TA. Please send emails through your official utoronto email address. When you e-mail, please include the **course number (i.e., PSY496) in the subject heading**. If you have questions regarding course content, please post them on the Quercus Discussion Board (under the "General Questions on Course Content" forum or on the discussion forum for each lecture) instead of emailing me or the TA. We will only respond to questions regarding course content that are posted in the forums on Quercus or are brought up during office hours. If you send questions regarding course content

via email, you will be redirected to post the questions on the forums or to bring them up during office hours. Questions that require lengthy responses will be discussed in class and/or during office hours. We encourage you to answer questions from other students on the forums on Quercus. It will help with your own learning.

If you have questions about class assignments (except for the in-class article presentations), please contact the TA. If your question is related to the article presentations or something other than course content (e.g., illness or emergency), please email me, the course instructor.

Please make sure the answer to your question is not already in the syllabus or the course website on Quercus before emailing me or the TA.

EVALUATION

Assignment	Proportion of Grade	Date
Article Presentations	15%	***
Term Test 1	25%	October 16, 2023
Paper Topic	2%	October 23, 2023
Research Proposal Paper	33%	November 20, 2023
Term Test 2	25%	December 4, 2023

***Article presentation date varies based on when the group has been assigned to present.

Article Presentations
Students will be assigned to groups of 4-5 people by the course instructor to present one of the empirical papers listed under "Article Presentation" in the course overview (see last page of this syllabus). Working together, you will prepare an approximately 10-minute slide presentation which outlines the topic of the article. The presentation should provide background information about the topic (including an overview of the history and current state of research in the specific field), the methods of the research, and the results and conclusions of the paper (including the significance/impact of the research). You should also provide discussion questions at the end of the presentation that encourage critical evaluation of the work. You will be marked together as a group. **Each group should submit their presentation slides to me via email by the end of the class (5:00 pm Eastern time) on the day of their presentation**. The slides will be marked as part of the presentation.

Each group should designate one of their group members to send me an email by **September 13, 2023 at 9 pm** (Eastern time) to let me know the following: (1) the top three dates (can also indicate their preferred article) that they want to present; (2) any dates that all members of the group cannot be in class to present. If I do not hear from a group by the due date, I will assign them to an article to present.

Term Tests
The test material will be primarily from the lectures but will also include material from the assigned readings (including the articles for the group presentations). Students are responsible

for attending lectures and reading the assigned materials as lectures will not cover all material contained in the readings and vice versa.

Paper Topic
Students must submit a topic for their research proposal via Quercus by **October 23, 2023 at 11:59 pm** (Eastern time). This is to allow students to plan their paper well ahead of the due date and make sure that their topic is suitable. Please note that the nature of this exercise does not accommodate late submissions (not including cases where a student has been given an extension). Hence, late submissions will be treated as zero for this assignment. That being said, late submissions will still be accepted so that students can get feedback on the suitability of their topic.

Research Proposal Paper
Students will write a 2100-2500 word paper and follow APA style format. This paper is a research proposal in which students will propose a new experiment to study a cognitive process in a neurological disorder. **The disorder must be one that is discussed in the course**. The research proposal must address a current gap in the literature and not be a replication of a previous study. Further details on the paper will be discussed in class and posted on Quercus. The paper must be submitted via Quercus by **November 20, 2023 at 11:59 pm** (Eastern time). Late submissions are subject to 5% late penalty per day, including weekends. The penalty is a flat deduction, such that if you score 75% on the report and it was 1 day late, your final grade will be 70%.

COURSE POLICIES
Missed Tests or Assignments Policy
If you become ill or experience a personal or familial emergency (e.g., death of a family member or friend) and it affects your ability to write a term test, complete your research proposal paper (including the paper topic assignment) on time, or be present in class to present the assigned article with your group, contact me as soon as possible. Normally, I will ask you for documentation in support of your specific circumstances. This documentation can be an **Absence Declaration (via ACORN)** or the University's **Verification of Student Illness or Injury (VOI) form**. The VOI indicates the impact and severity of illness, while protecting your privacy about the details of the nature of the illness. You can submit a different form (like a letter from a doctor), if it is an original document, and contains the same information as the VOI. For more information on the VOI, please see http://www.illnessverification.utoronto.ca.
For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence. Please note that per the University's policy, **the Absence Declaration can only be used once per semester**. The VOI does not have a limit.

If you miss a term test or assignment, you need to reach out to me or the TA within one week of missing the test or assignment, this includes providing the supporting documentation. If you miss a term test and provide documentation in support of your absence, a make-up test will be arranged. If you miss the group presentation with valid documentation, you will receive the same mark as your group. If the entire group misses their presentation with valid

documentation (e.g., illness that affects the whole group), they will be rescheduled to present at a later date, if time permits. If that is not possible, then the group can submit a 1-2 page written summary of their assigned article to be marked as make-up for the in-class presentation.

Appeals
Students who have a complaint about the way a term test and/or written assignment was marked must first approach the TA to discuss their concern. If the student is not satisfied with the way the meeting went, they can contact me. Complaints about marks for the group article presentation should be made directly to me as I will be the one marking the article presentations.

All requests for a regrade must be submitted to me with specific justification, in writing, within 2 weeks of the exam or assignment being made available for student viewing. For the research proposal, you must also complete a marking rubric for your own report and justify any differences between your completed rubric and the TA's completed rubric. A legitimate request will result in the **entire exam or assignment** being re-graded not only the parts where you think you were marked unfairly. Note that marking errors go in both directions and I will be looking for all errors in marking, not just those that will increase your grade. Hence, your overall grade could increase, decrease, or stay the same.

Religious Accommodation
As a student of the University of Toronto, you are part of a diverse community that welcomes and includes students, faculty and other staff from a wide range of backgrounds, cultural traditions, and spiritual beliefs. For my part, I will make every reasonable effort to avoid scheduling tests or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (like a test or in-class presentation) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two or three weeks in advance), so that we can work together to make alternate arrangements.

Academic Misconduct and Plagiarism
All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism – representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program – is a serious offence that can result in sanctions. Speak to me or the TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support see the U of T writing support website at https://writing.utoronto.ca/. For a complete outline of the University's policy and expectations, consult the Code of Behaviour on Academic Matters at https://www.viceprovoststudents.utoronto.ca/students/#codeacademic. For more information, please see: https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity.

All suspected cases of academic misconduct will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citations methods, you are expected to seek out additional information on academic integrity from me, your TA, or from other institutional resources, see https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity/where-get-help.

Generative AI Tools

Students may use generative artificial intelligence (AI) tools (e.g., ChatGPT) to contribute to their understanding of course content. However, students may not use AI tools for taking tests, writing their research proposal (this includes generating the topic for the proposal), summarizing their article for the in-class presentation, or creating bullet points or questions for presentation slides. Students must note that these AI tools can provide the wrong information while sounding authoritative about the topic. You should check other sources of information, including speaking with me or the TA, to ensure the accuracy of the information you obtain from generative AI tools. Students are ultimately accountable for the work they submit.

Equity and Academic Rights

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment, and hate speech will not be tolerated. If you have any questions, comments, or concerns you can speak with me or contact the Equity & Diversity Office (https://people.utoronto.ca/inclusion/institutional-equity-office/).

Classroom Etiquette

Please always treat each other in a respectful manner. All students are expected to uphold the Code of Student Conduct (https://www.viceprovoststudents.utoronto.ca/students/#codeconduct). While you are in class, you are expected to be mentally present. Although technology can support student learning, it can also become a distraction. Out of respect for your fellow students in this class, please refrain from using laptops or mobile phones for entertainment during class. Do not display any material on a laptop which may be distracting or offensive to your fellow students. Laptops may be used only for legitimate classroom purposes, such as taking notes, downloading course information from Quercus, or working on an assigned in-class exercise. Checking social media, texting, playing video games, and other online activities are not legitimate classroom purposes. Such inappropriate laptop and mobile phone use is distracting to those seated around you.

Recording Lectures

Students are permitted to create audio-recordings of the lectures for their personal use. Video recording and photographing are prohibited unless I have granted the student explicit

permission. In accordance with the Accessibility for Ontarians with Disabilities Act, 2005, persons who have special needs will be accommodated. Recordings are intended to permit lecture content review to enhance understanding of the topics presented. Audio-recordings are not substitutes for attending class. Students should note that since audio recordings are to be permitted, their voice may be recorded by others during the class. Please speak with me if this is a concern for you.

Students agree to the following terms when creating audio recordings of lectures: (1) Recordings are not to be distributed via the Internet, using social media such as Facebook, peer-to-peer file sharing such as One Drive or Dropbox, or other distribution channels; (2) Recordings are not to be shared with other classmates unless they are to be used in collaborative assignments or if I give permission for other reasons. Non-compliance with these terms is considered to violate an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary actions under the Code of Student Conduct.

ACADEMIC RESOURCES
Access & Diversity
Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (https://studentlife.utoronto.ca/department/accessibility-services/) at the beginning of the academic year. AS will assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private. AS will not share details of your condition with me or the TA and we will not reveal that you are registered with AS.

Mental Health and Well-being
As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating, financial concerns, family worries, and so forth. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities. Everyone feels stressed now and then – it is a normal part of university life. Some days are better than others, and there is no wrong time to reach out. There are resources for every situation and every level of stress. There are many helpful resources available through your College Registrar or through Student Life, see http://studentlife.utoronto.ca and http://www.studentlife.utoronto.ca/feeling-distressed. An important part of the University experience is learning how and when to ask for help. Please take the time to inform yourself of available resources.

Writing Support
The University provides students with numerous resources to help them with writing. For more information on campus writing centres and writing workshops, please visit https://writing.utoronto.ca/writing-centres/.

Other Resources

Student Life Programs and Services
https://studentlife.utoronto.ca/

Academic Success Services
https://studentlife.utoronto.ca/department/academic-success/

COURSE OVERVIEW

Week	Lecture	Date	Topic	Background Readings	Article Presentation	Due
1	1	Sep. 11	Neuropsychological Testing	Ch. 30 (Schoenberg, 2011)	NA	
2	2	Sep. 18	Neuroanatomy Overview	Ch. 1 (Uysal, 2023) Ch. 3 (Schoenberg, 2011; optional)	NA	
3	3	Sep. 25	Epilepsy	Ch. 19 (Uysal, 2023)	Baxendale, 2020 Grayson-Collins, 2019	
4	4	Oct. 2	Parkinson's Disease	Ch. 19 (Schoenberg, 2011)	Cavanagh, 2017 Ray, 2018	
5		Oct. 9	**Thanksgiving Day**			
6		Oct. 16	<mark>Term Test 1</mark>			
7	5	Oct. 23	Alzheimer's Disease	Ch. 8 (Schoenberg, 2011) Ch. 14 (Schoenberg, 2011)	Maass, 2019 Fernandez-Cabello, 2020	**Paper Topic**
8	6	Oct. 30	Alzheimer's Disease and Other Dementias	Ch. 8 (Schoenberg, 2011) Ch. 14 (Schoenberg, 2011)	Reul, 2017 Winston, 2016	
9		Nov. 6	**Reading Week**			
10	7	Nov. 13	Schizophrenia	Barch, 2012 Howes, 2015	Fan, 2019 Moritz, 2017	
11	8	Nov. 20	Mood Disorders	King, 2019	NA	**Research Proposal Paper**
12	9	Nov. 27	Autism	Lord, 2018	Hollocks, 2022 Martinez, 2020	
13	10	Dec. 4	<mark>Term Test 2</mark>			

Drop date: November 6, 2023 – last day to drop courses from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a 0 is assigned for incomplete work), and calculated into the GPA.