

# PSY372H1S: Human Memory LEC0201 Wednesdays 9 am - 12 pm UC 52

### **Course Delivery**

This is an in-person course. Students are expected to attend lectures in-person whenever possible. Every attempt will be made to provide complete recordings of all lectures, however, recordings may not be available if there are technical difficulties with the recordings. You must attend in person to get the attendance credit.

If external circumstances change (e.g. public health guidelines, instructor illness/quarantine, etc.), the course may need to move online for one or more lectures.

#### **Contact Information**

#### **Course Instructor**

Dr. Christine Burton <a href="mailto:christine.burton@utoronto.ca">christine.burton@utoronto.ca</a>

#### Office hours

Sign-up for office hours required at https://calendly.com/christine-burton/office-hour-1

All office hours will be individual 15-minute appointments during the following times:

Tuesdays 11 am – 12 pm online only Thursdays 2 – 3 pm online or in person (SS4001) Friday 9:30-10:30 am online only

# **Teaching Assistant**

Arya Rahbarnia: arya.rahbarnia@mail.utoronto.ca

Arya will be available to meet with students after the distribution of graded tests and assignments.

#### **Course Description**

This course examines the systems and processes humans use to encode, store and retrieve information. Evidence from the disciplines of cognitive psychology, neuroscience and neuropsychology will be brought together to paint a picture of the current understanding of human memory. The course focus will be on the theories, methodological approaches and key features of our memory systems.

**Prerequisites**: PSY201H1/ ECO220Y1/ EEB225H1/ GGR270H0H1/ POL222H1/ SOC202H1/ STA220H1/ STA238H1 / STA248H1/ STA288H1/ ECO220Y5/ PSY201H5/ STA215H5/ STA220H5/ PSYB07H3/ STAB22H3/ STAB23H3/ STAB57H3, *and one of* PSY260H1/ PSYB38H3 *or* PSY270H1/ PSY270H5/ PSYB57H3/ COG250Y1 **Exclusions**: PSY372H5/ PSYC53H3

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. If you lack any prerequisites you WILL BE REMOVED.

### **Course Objective**

My goals for this course are to help you gain a thorough understanding of classic and contemporary theories of human memory. I want you to be able to recognize the importance of, not just our memory system in general, but also understanding how memory works. In this course, you will begin to evaluate theories and apply your knowledge to new questions about human memory.

By the end of the course you will be able to:

- Understand the influences of early theories of memory on contemporary ideas
- Describe classic and current theories of STM/WM, implicit memory, and LTM
- Describe theories of how we remember and why we forget
- Describe research methods used to study memory and apply them to answer real-world problems
- Critically evaluate and discuss published research papers
- Think about research systematically to propose future research projects

### **Reading Material**

Radvansky, G.A. Human Memory 4th Edition. Taylor & Francis: Routledge. ISBN 978-0-36725291-5.

#### **Course Evaluation**

Midterm test	February 12	27%	Movie review	February 26	10%
Final exam	TBA	30%	QALMRI	January 22	2 @ 5% each –
			summaries	and February	10 %
				5	
Attendance	ongoing	3%	Research proposal	March 12	5%
			QALMRI summary		
			Final research	April 2	15%
			proposal		

#### **Assessment Details**

<u>Tests</u> (worth 57% of final course grade)

The midterm test and final exam will assess your knowledge of the material covered in lectures and the textbook. The test and exam will focus on lecture material but you will be responsible for any textbook material that is relevant to learning objectives provided in class. The test and exam will consist of short, medium, and long answer questions. Short answer questions will target knowledge of specific facts, medium answers will tap your understanding of theories and concepts, and long answer questions will target depth of understanding and critical reasoning. The test will be held in our classroom (UC 52) from 9:10-11:10 am. The final exam will be scheduled by A&S between April 9-30. The final exam will not be cumulative so will only cover material discussed after the midterm test.

### Written assignments (worth 40% of final course grade)

All of the written assignments are designed to help you create a final research proposal at the end of the course.

- 1. **QALMRI summaries** (5% each): After reading an assigned article (provided on Quercus), you will meet in groups during lecture to evaluate the article using the QALMRI method. Based on this discussion and your understanding of the article, you will write an individual QALMRI summary to submit the following week. These summaries are meant to help you focus on important information when reading research articles or when designing your own research.
- 2. **Movie review** (10%): For this assignment you will provide a short review of a movie or television show that is related to memory. Your task will be to explain what type of memory is being portrayed in the movie/show and whether it is an accurate portrayal. Your review should be no more than 2 double-spaced pages. This assignment is meant to get you started thinking about how memory research can be applied to everyday situations and is a prerequisite for the research proposal.
- 3. **Research proposal QALMRI summary** (5%): To help organize your thoughts related to a final research proposal, you will use the QALMRI method to write a summary of a unique research proposal. However, your research question must be based on the issues you raised in your movie review. That is, I want you to propose an experiment that can help address some of the problems or questions you had related to your review. You could propose research that addresses a specific inaccuracy in the movie, or a question that the movie failed to answer. If your movie was an excellent representation of memory, your proposal could be for the "next step" in learning more about that type of memory.
- 4. **Final research proposal** (15%): The final written assignment will be a culmination of your previous written assignments. You will use the skills gained from practice with the QALMRI method to propose novel research related to a topic you considered in your movie review. The final proposal should be 6 to 8 double-spaced pages.

### Attendance (worth 3% of final course grade)

You are expected to be present in class as much as possible to contribute to your group discussions. You will be given time at the end of some classes throughout the semester to meet with your group to brainstorm ideas for your upcoming assignments so attendance is particularly important during these classes.

# **Class Schedule**

Date	Торіс	Readings	
January 8	Introduction, Methods and the Brain	Chapters 1, 2, and 3 *QALMRI method and Karpicke and Roediger (2008).	
January 15	Introduction, Methods and the Brain	Chapters 1, 2, and 3	
January 22	STM and WM Karpicke & Roediger (2008) QALMRI summary due	Chapters 4 and 5 *Conway et al. (2001).	
January 29	STM and WM	Chapters 4 and 5	
February 5	Nondeclarative memory  Conway et al. (2001) QALMRI summary due	Chapter 6	
February 12	Midterm test		
February 19	Reading Week: NO CLASS		
February 26	Episodic and Semantic Memory  Movie review due	Chapters 7 and 9	
March 5	Episodic and Semantic Memory	Chapters 7 and 9	
March 12	Forgetting and Amnesia Research proposal QALMRI due	Chapters 8 and 10	
March 19	Forgetting and Amnesia	Chapters 8 and 10	
March 26	Autobiographical memory and Memory errors	Chapters 12 and 13	
April 2	Autobiographical memory and Memory errors  Final research proposal due	Chapters 12 and 13	

<sup>\*</sup> These readings must be completed before the following class because you will be using them for your group work during class.

# **IMPORTANT COURSE POLICIES** \*\*PLEASE READ\*\*

# **Course webpage**

This Course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. New information and resources will be posted regularly as we move through the term. To access the course website, go to the U of T Quercus log-in page

at <a href="https://q.utoronto.ca">https://q.utoronto.ca</a>. SPECIAL NOTE ABOUT GRADES POSTED ONLINE: Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in 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.

#### **Email**

The main source of communication for the course will be email. Please include the course code (PSY372) in the subject line in all your emails about the course. Please avoid sending me messages directly from Quercus/Canvas because I don't monitor it regularly. I will respond to emails as soon as I can in the order I receive them. Please note that I don't regularly respond to emails during evenings and on weekends.

#### **Missed Test Special Consideration Request Process**

If you miss a test for reasons beyond your control (illness or accident), please contact me with documentation in support of your specific circumstances within one week of the missed test. 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 the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see <a href="https://www.registrar.utoronto.ca/policies-and-guidelines/verification-of-illness-or-injury/">https://www.registrar.utoronto.ca/policies-and-guidelines/verification-of-illness-or-injury/</a>. For information on Absence Declaration Tool for A&S students, please see <a href="https://www.artsci.utoronto.ca/absence">https://www.artsci.utoronto.ca/absence</a>. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

If your request is approved, you will have ONE opportunity to write a make-up test. If you miss the make-up test and can provide supporting documentation for your absence, the weight of the missed test will be added to your final exam.

#### **Requests for Re-grading**

All requests to re-grade tests or assignments must be made within 2 weeks of receiving your grade. **Please direct all requests for re-grading directly to the person who marked your work.** If you are dissatisfied after meeting with the TA you may submit your work to the instructor. Keep in mind that if you submit your work to be re-graded, your grade could go up or down. This policy applies to work submitted to the instructor or the TAs.

# **Accommodations for Personal Reasons**

There may be times when you are unable to complete course work on time due to non-medical reasons. If you have concerns, speak to me. Extensions for term work can be arranged on a case-by-case basis. It is also a very good idea to speak with an advisor in your College Registrar's office; they can support you in requesting extensions or accommodations, and importantly, connect you with other resources on campus for help with your situation.

As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation, 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 (<a href="http://studentlife.utoronto.ca">http://studentlife.utoronto.ca</a> and <a href="http://studentlife.utoronto.ca/feeling-distressed">http://studentlife.utoronto.ca/feeling-distressed</a>). 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.

#### **Penalties for Lateness**

The penalty for lateness is 5% of the total per calendar day.

Students who seek to be granted more time to complete their term work beyond the due date without penalty, owing to circumstances beyond their control (e.g., illness, or an accident), must do so by submitting a request directly to the instructor for the period up to and including the last day of the final assessment period. All requests for extensions must include supporting documentation, which can include an ACORN absence declaration, a VOI form, or an email from a U of T student support office (e.g. College registrar, Accessibility Services, etc).

Any term work that will be handed in **after** the final assessment period is subject to a petition for extension of term work. This petition should be filed with the student's College Registrar's Office.

#### **Plagiarism Detection Tool**

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

Students who wish to opt-out of using the University's plagiarism detection tool for the case study assignment must notify the instructor (via Quercus inbox message/email) no later than 5PM on September 20. Upon receipt of notification, the instructor will request that the student provide all rough work (including, but not limited to, call numbers and/or URLs for all cited sources) when submitting their case study assignment.

#### **Academic Integrity and Plagiarism**

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.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the <u>Code of Behaviour on Academic Matters (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019)</u>. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For example, 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 <a href="http://www.writing.utoronto.ca">http://www.writing.utoronto.ca</a>. Consult the Code of Behaviour on

Academic Matters for a complete outline of the University's policy and expectations. For more information, please see <u>A&S Student Academic Integrity</u> (https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the <u>University of Toronto Website on Academic Integrity</u> (https://www.academicintegrity.utoronto.ca).

### **Use of Generative AI**

In this course, you may use generative artificial intelligence (AI) tools, including ChatGPT, Microsoft Copilot, and GitHub Copilot, as learning aids, however, you should not use generative AI to produce any written work in the course. For example, you may use generative AI to help you brainstorm topic ideas or to check APA formatting, but none of your assignments should include content generated by AI. You will not be permitted to use generative AI on the midterm test or final exam. While some generative AI tools are currently available for free in Canada, please be warned that these tools have not been vetted by the University of Toronto and might not meet University guidelines or requirements for privacy, intellectual property, security, accessibility, and records retention. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. These tools may even provide citations to sources that don't exist—and submitting work with false citations is an academic offense. These tools may be subject to service interruptions, software modifications, and pricing changes during the semester.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely entirely on these tools to complete your coursework. Instead, we recommend treating generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Overreliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance on the midterm test or final exam, in later courses, or in future work or studies after graduation.

### **Privacy and Copyright Disclaimer**

### Notice of video recording and sharing (Download permissible; re-use prohibited)

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. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

For questions about the recording and use of videos in which you appear, please contact your instructor.

# **Academic Resources**

# **Departmental Guidance for Undergraduate Students in Psychology**

The Department of Psychology recognizes that, as a student, you may experience disruptions to your learning that are out of your control, and that there may be circumstances when you need extra support. Accordingly, the department has provided a helpful guide at <a href="https://www.psych.utoronto.ca/current-program-students/guidance-undergraduate-students-psychology">https://www.psych.utoronto.ca/current-program-students/guidance-undergraduate-students-psychology</a> to clarify your and your instructor's responsibilities

when navigating these situations. This guide consolidates Arts & Science Policies for undergraduate students in one place for your convenience. As an instructor in the department, I will frequently consult with these recommendations when providing you with support, and I recommend that you also consult it to learn more about your rights and responsibilities before reaching out to me.

# **Accessibility Needs**

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) at the beginning of the academic year by visiting <a href="https://studentlife.utoronto.ca/department/accessibility-services/">https://studentlife.utoronto.ca/department/accessibility-services/</a>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your 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 needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

# Writing

As a student here at the University of Toronto, you are expected to write well. The university provides its students with a number of resources to help them achieve this. For more information on campus writing centres and writing courses, please visit <a href="http://www.writing.utoronto.ca/">http://www.writing.utoronto.ca/</a>.

### **English Language Learning**

English Language Learning (ELL) supports all U of T undergraduates enrolled in the Faculty of Arts & Science whose first language is not English (multilingual students), as well as native speakers seeking to improve their English language skills. Our mini-courses and other activities are designed and taught by U of T professors, and they free. For more information, please visit <a href="https://www.artsci.utoronto.ca/current/academic-advising-and-support/english-language-learning">https://www.artsci.utoronto.ca/current/academic-advising-and-support/english-language-learning</a>

### **Academic Success**

The Centre for Learning Strategy support helps you identify and achieve your learning goals. You have a lot more going on in your life than just academic responsibilities, and they can help tailor your learning supports to fit you. You will find a number of courses, workshops, and one-on-one appointments to help improve many different skills related to academic achievement. <a href="https://studentlife.utoronto.ca/department/academic-success/">https://studentlife.utoronto.ca/department/academic-success/</a>