

## PSY372H1 – Human Memory Syllabus 2023 Fall

<b>Classes</b>	In-Person Wednesday 2-5pm: SK548
<b>Description</b>	This is an in-person course and students are expected to participate in person in every class. There is a possibility that some guest lecturers may choose to host their lecture online. In this case, we will still meet in the classroom, and I will broadcast the guest lecture via zoom in the classroom.
<b>Instructor</b>	Melisa Gumus Vanier Scholar & PhD Candidate, Department of Psychology, University of Toronto Research Analyst, Research and Development, (Winterlight) Cambridge Cognition <a href="mailto:melisa.gumus@mail.utoronto.ca">melisa.gumus@mail.utoronto.ca</a> Office hours: Wednesday 5-6 pm. Also available to book 1-1 meetings upon email
<b>Teaching Assistant</b>	Nelly Matorina Department of Psychology, University of Toronto <a href="mailto:nelly.matorina@mail.utoronto.ca">nelly.matorina@mail.utoronto.ca</a>

### Course Description

Our memories give us our own unique identities. We accumulate knowledge as we live and experience, in turn, our prior knowledge guides our decisions and thoughts in future situations. While we learn and form new memories, some of the existing ones are forgotten over time. Human memory is a fascinating phenomenon that its formation, storage, maintenance occur in a dynamic cycle. In this course, we will explore the history, research methodology, theories, and contemporary issues in the study of human memory. More importantly, we will discuss each topic from a scientific perspective.

### Learning Outcomes for Students

1. Learn about the scientific study of human memory from both historical and current perspectives.
2. Become an informed consumer of research in human memory by learning to translate between data and theory while being critical about the limitations to any approach.
3. Develop critical thinking skills to explore and integrate your knowledge to address research questions in human memory research.
4. Gain scientific literacy skills by reading peer-reviewed papers, discussing and being critical about reported results, conveying your ideas in a precise way.



### Class Schedule

Week/ Date	Topic	Readings	Assignments (Due Fridays by 11:59pm)
1) Sep 13	<ul style="list-style-type: none"> <li>• Course overview</li> <li>• Overview and history of memory research</li> <li>• Neuroscience of memory</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 1-2</li> <li>• QALMRI</li> </ul>	Fill in “Get to know PSY372 students” survey
2) Sep 20	<ul style="list-style-type: none"> <li>• Methods in memory research</li> <li>• Sensory, short-term, and working memory</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 3-5</li> <li>• Karpicke &amp; Roediger, 2008</li> </ul>	Draft responses for Karpicke and Roediger, 2008 - due: Sep 22
3) Sep 27	<ul style="list-style-type: none"> <li>• Episodic long-term memory</li> <li>• Forgetting</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 7-8</li> </ul>	Final responses for Karpicke and Roediger, 2008 - due Sep 29
4) Oct 4	TERM TEST 1		
5) Oct 11	<ul style="list-style-type: none"> <li>• Nondeclarative memory</li> <li>• Semantic memory</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 6 and 9</li> <li>• Robin et al., 2019</li> </ul>	Draft responses for Robin et al., 2008 - due Oct 13
6) Oct 18	<ul style="list-style-type: none"> <li>• Autobiographical memory</li> <li>• Forms of amnesia</li> <li>• Tips for effective writing</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 12 and 18</li> <li>• Gopen &amp; Swan, 1990</li> </ul>	Final responses for Robin et al., 2008 - due Oct 20
7) Oct 25	<ul style="list-style-type: none"> <li>• New directions in memory research</li> </ul>	<ul style="list-style-type: none"> <li>• See required readings list</li> </ul>	Review paper topic approval - due Oct 27 (optional)
8) Nov 1	TERM TEST 2 (Drop deadline Nov 6)		
9) Nov 8	Reading week – no class		
10) Nov 15	<ul style="list-style-type: none"> <li>• Guest lecture by Nelly! Memory across the lifespan: development &amp; aging</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 16-17</li> </ul>	Review paper draft due - Nov 17
11) Nov 22	<ul style="list-style-type: none"> <li>• Formal models of memory: memory in time and space</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 10-11</li> </ul>	Review paper peer review - due Nov 24
12) Nov 29	<ul style="list-style-type: none"> <li>• Memory and reality</li> <li>• Memory and the law</li> <li>• Metamemory</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 14-15</li> </ul>	Review paper final version - due Dec 1
13) Dec 6	TERM TEST 3		

### Evaluation Matrix

Assignment	Weight	Due date
Paper discussion: draft response	1% each	Sep 22 - paper #1 Oct 13 - paper #2
Paper discussion: final response	5% each	Sep 29 - paper #1 Oct 20 - paper #2
Term tests	18% each	Oct 4 – term test 1 Nov 1 – term test 2 Dec 6 – term test 3
Review paper: draft	5%	Nov 17
Review paper: peer review	5%	Nov 24
Review paper: final	24%	Dec 1

### Evaluation Details

#### 1) Term Tests

Although the emphasis will be on material covered during lectures, the term tests may contain any material from the class lectures, textbook, or the assigned articles. As the lectures will always cover some information not contained in the texts (and vice versa), it is important that you both attend the lectures and do the readings. The term tests are non-cumulative. That is, the questions are grounded in the material covered in the preceding three lectures. However, some questions will require integration of material covered across the course, so do not forget what you have learned! Term tests will be written in-person during our normal class time.

#### 2) Paper Discussions

Twice throughout the term you will read an article and discuss it in your small group. The outcome of this discussion will be a short-written assignment, which you will submit individually but should be informed by your group discussion.

- **Step 1 – Draft responses:** You will individually read the paper and write a draft of your responses to the questions (see Quercus assignment page). You do not need to worry about writing full sentences for this; the goal is for you to think critically about the assigned paper on your own and make notes to yourself so you can contribute to the group discussion. If your responses indicate you have read the paper and thought critically about it, you will receive full points for this step.
- **Step 2 – Discuss with your group:** Bring your draft responses (as well as any questions you might have) to your group and discuss. All group members need to participate in the discussion. Be sure that you use this time to clear up any confusion you have about the paper. You should allocate about 1 hour for this if you are participating synchronously (can be held over Zoom or in person; this is up to your group).
- **Step 3 – Refine your responses:** Submit an updated version of the assignment on Quercus that has your final responses, refined to consider what you learned during your group discussion. The content of your assignments across group members may be

similar, but you must write your own (individual) responses. In addition, your responses do not have to reflect the thoughts of your group members (e.g., if your group did not reach consensus or you have a different opinion). This assignment will be marked for both quality of content and writing style; this is a formal writing (though short) assignment, and you should use complete sentences.

### 3) Review Paper

The review paper assignment is designed to improve your ability to critically evaluate empirical research. The review paper will be based on the topic of memory schema (see “New Directions” articles for an introduction to the topic). First, you need to pick a research article. You should focus on a recent empirical article (i.e., not a review paper, chapter, or book) that was published in the last three years. The primary article must be from a journal that is indexed on PubMed. You may select a study that was conducted in either humans or non-humans. You should choose one article as the focus of your paper, but you should cite a minimum of four additional articles to back up any claims you make. These supporting articles are not limited to the past three years. For full marks, references will go beyond articles assigned for class. The review paper should include:

- a) A summary of the primary article and how it relates to assigned topic. This should include a brief and concise description of the article. When describing a study, you should focus on its rationale and aims, methods, results, and a discussion of the conclusions. No more than one full page is recommended.
- b) A commentary or critique of the article should express your critical evaluation on the topic, not just a regurgitation of a given study’s findings. This section is more open-ended and may involve relating the findings to other research articles or a “real-life” situation (and discussion of the scientific implications for the real world), describing what you found particularly interesting about the topic, stating whether you were convinced by the results, describing any limitations of the studies, or suggesting ideas for future research. It does not have to be a negative commentary: you may discuss strengths and/or weaknesses of the study. The evaluation of this section of the review paper will be based on your understanding of the issues covered in the article, your ability to articulate your thoughts on the article, your ability to synthesize the findings with other information (e.g., other material covered in the course), and the depth at which you evaluate the article. Prior to the review paper deadline, there will be a lecture that includes a discussion of effective scientific writing.
- c) Formatting: Your paper should be approximately 1500 words (~6-8 pages; 8 pages max). Please use 12-point font, double spacing, and 1 inch margins. Include a minimum of 5 references. All references should be listed using APA style.
- d) Paper Submission Method: The review paper must be uploaded to Quercus before the deadline. You must upload your document in PDF format. This includes an Ouriginal Review (see Course Policies).

These are the steps we will follow in the review paper assignment:

- **Step 1 – Paper approval (optional):** You can submit your chosen article to Quercus to confirm whether it meets the requirement for the assignment.
- **Step 2 – Full draft:** You will individually read your chose paper and write a full draft of your review paper that includes all components of the assignment. These will be marked for completion, within reason. Unlike the paper discussions, you must submit a complete draft that includes all parts to receive full marks. Outlines or notes will not receive full marks. If your responses indicate you have read the paper and thought critically about it, you will receive full points for this step.
- **Step 3 – Peer review:** You will need to review one of your peer’s submitted drafts where you will be rating and providing feedback and suggestions to improve their paper. This part is to mimic actual peer-review process that begins after submitting a manuscript to a journal. You need to provide 2 main scientific questions for the author of the assignments you are reviewing. These can be related to many aspects including but not limited to their hypotheses, theories they are describing, their explanation/discussion of the papers they have cited. In order to receiving full marks, your response should show critical thinking and provides scientific feedback to improve your peer’s assignment. Providing superficial feedback regarding the length of the paper, aesthetics, or lack of clarity is not sufficient to receive full marks.
- **Step 4 – Final submission:** Submit the final version of your review paper that has been refined to consider the feedback you received in your peer review. At this point, you can make improvements to your paper. If you have previously missed any sections or information in your draft submission, please make sure you include all necessary components in the final version. Please use 12-point font with double spacing and 1-inch margins. All references should be listed using APA style. Please submit your file as a PDF using the following convention: PSY372\_2023F\_[lastname]\_review\_paper.pdf, where [lastname] should be replaced with your last name. The evaluation of this section of the review paper will be based on your understanding of the issues covered in the article, your ability to articulate your thoughts on the article, your ability to synthesize the findings with other information, and the depth in which you evaluate the article.

## Course Policies

### University's 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 website (<https://uoft.me/pdt-faq>).

### Missed Tests

This course follows the University of Toronto’s Policies on missed assignments and tests. Students are expected to follow these policies and procedure as they will be strictly enforced.

Every reasonable effort should be made to ensure completion of all 3 tests. There will be no make-up tests. If you are unable to complete the test for an approved and documented reason, your grade will be reasonably re-weighted at the instructor's discretion. Please refer to "Specific Medical Circumstances" section below for how you could provide documentation. You have one week from the date of the missed test to contact the instructor with the documentation. Without acceptable documentation, you will receive a grade of zero on missed tests.

For extended absences and for absences due to non-medical reasons, make sure to contact your College Registrar's Office. They can help you decide between a request for an extension or other types of academic consideration. They may be able to provide a College Registrar's letter of support and connect you with other helpful resources on campus.

### **Late/Missed Assignments or Extension Requests**

Extensions will only be granted for documented and approved reasons. Please note that this policy applies to everything due in this course. For late submission without any documentation, the following policies will be implemented: 5% per day penalty thereafter. Please see "Missed Tests" section on how to provide documentation.

### **Regrading Tests or Assignments**

All requests for re-marking must be submitted in writing within two calendar weeks of the first day the marked test or assignment is available for student viewing. Only requests that include adequate written justification of an oversight in the original grading will be considered. Be as specific as possible. A legitimate request will result in the entire test or assignment being re-graded. Note that in agreeing to resubmit your work for remarking, you are agreeing to a re-evaluation of the entirety of your work; your grade may go up, go down, or stay the same. If there has been an error in our arithmetic, please let us know and we will immediately recalculate your grade (no written request necessary in this case).

### **Religious Accommodations**

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of cultural and religious traditions. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, 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 (such as a test or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

### **Students with Disabilities or Accommodation Requirements**

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 <https://studentlife.utoronto.ca/departments/accessibility-services/>. 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.

### **Academic Integrity**

The University of Toronto treats cases of academic misconduct very seriously. Academic integrity is a fundamental value of learning and scholarship at the UofT. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that your UofT degree is valued and respected as a true signifier of your individual academic achievement. The University of Toronto's Code of Behaviour on Academic Matters outlines the behaviours that constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes working in groups on assignments that are supposed to be individual work).

Any instance of suspected academic dishonesty will be reported to the Office of Student Academic Integrity. For further information on you may wish to visit <https://www.academicintegrity.utoronto.ca/perils-and-pitfalls/>.

### **Specific Medical Circumstances**

If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical 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 the 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), as long as it is an original document, and it 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>. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

### **Accommodation 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 or to an advisor in your College Registrar's office; they can help you to decide if you want to request an extension or other forms of academic

consideration. They may be able to email your instructors directly to provide a College Registrar's letter of support and connect you with other helpful resources on campus.

### **Quercus Info**

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 <https://q.utoronto.ca>. 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.

### **Health and Wellness**

The university experience can be a challenging one, there is no need to go about it alone. If you or anyone you know could use someone to talk to (or text with), here are some resources in addition to your instructors, program coordinators, and TAs:

- Your college registrar and office of residence of student life (ORSL)
- MySSP [24/7, talk in 146 languages & text in 35 languages]: available on Apple App Store and Google Play Store.
- Good 2 Talk Student Helpline [24/7]: 1-866-925-5454
- Gerstein Centre [24/7]: 416-929-5200

### **Academic Support**

- Writing Centre for all writing-related help  
(<https://writing.utoronto.ca/writingcentres/arts-and-science/Links to an external site.>)
- Study Hubs for weekly goal-oriented study sessions  
(<https://studentlife.utoronto.ca/program/study-hubs/Links to an external site.>)
- Recognized Study Groups to connect with fellow students in the same class  
(<https://sidneysmithcommons.artsci.utoronto.ca/recognized-study-groups/Links to an external site.>)
- Learning Strategist for one-on-one help to improve learning strategies  
(<https://studentlife.utoronto.ca/service/learning-strategist-connections/Links to an external site.>)