

# PSY270H5F – Cognition: The Machinery of the Mind

Friday 12:00pm – 3:00pm

Online Synchronous

## Course Delivery

This course will be delivered as a combination of asynchronous and synchronous online activities. Lectures will be given as a series of short videos totaling 2-3 hours/ week posted on Quercus before the designated class meeting time. Students are expected to attend live sessions via Zoom to participate in class activities and discussions during class time. Students will have the opportunity for synchronous online office hours and tutorials to ask questions and clarifications about lecture content. Students are expected to complete online homework via Top Hat each week.

Tests and the final exam will be time-limited and administered as Quercus quizzes.

## Learn Anywhere Guide for Students

<https://library.utm.utoronto.ca/students/quercus/learn-anywhere>

University of Toronto tech [requirements for online learning](#)

## Contact Information

### Course Instructor:

**Dr. Christine Burton**

email: [christine.burton@utoronto.ca](mailto:christine.burton@utoronto.ca)

### Office hours via Zoom

Mondays, Wednesdays and Fridays 3 - 4 pm

Tuesdays 9 - 10 am

Thursdays 11 am - 12 pm

### Teaching Assistants:

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

**Mateja Perovic** ([m.perovic@mail.utoronto.ca](mailto:m.perovic@mail.utoronto.ca))

**Hamid Moeiniasl** ([hamid.moeiniasl@mail.utoronto.ca](mailto:hamid.moeiniasl@mail.utoronto.ca))

**John Eusebio** ([john.eusebio@mail.utoronto.ca](mailto:john.eusebio@mail.utoronto.ca))

Sign-up for office hours required at

<https://calendly.com/christine-burton/office-hour>

## Course Description

Cognitive psychology is the study of the building blocks of how we think and reason. We need to be able to pay attention, create mental representations, remember information, manipulate knowledge and express thoughts. Thus, in this course we will discuss the fundamentals of attention, memory, problem solving, decision making and language.

## Course Objective

My goal for this course is to familiarize you with the leading theories in cognitive psychology so that you are able to discuss the fundamental topics in the field, create hypotheses using this knowledge and apply this to everyday situations. Assigned textbook readings explain important concepts and will help lay a foundation on which you can build your knowledge. In lectures we will elaborate on the material in the text and highlight connections between the various topics, experiments that have been conducted in the area, and real-life situations.

Experimentation is an important part of cognitive psychology so I have included assignments specifically designed to let you participate in cognitive psychology research and use your new knowledge.

By the end of this course, you should be able to:

- Describe the major terms, concepts and theories in cognitive psychology
- Understand how unconscious cognitive processes influence our everyday behaviour
- Understand how the historical development of cognitive psychology has shaped the questions researchers in cognitive psychology ask today
- Explain how empirical findings can support or refute psychological theories
- Identify key variables in empirical research and infer evidence-based conclusions
- Analyse and critique published research in cognitive psychology
- Communicate scientific data in the form of written reports

## Reading Material

**Cognitive Psychology by Elan Barenholtz et al.** This textbook is only available through the Top Hat platform. This allows significant savings for students and integration of all course materials into one platform.

In addition to the Top Hat textbook, we will be using Top Hat for participation this term and to facilitate the synchronous class activities.

There are different ways that you can purchase the textbook and Top Hat subscription.

1. **If you already have an active Top Hat subscription**, you will only need to purchase the textbook. You can do this at the UTM online bookstore or through Top Hat after you have added our class to your account. You will need to use our class Join Code (available on Quercus) to add the course before you can add the textbook
2. **If you do not have an active Top Hat subscription**, you will need to purchase both a subscription and the textbook. You can buy both of them through the UTM bookstore, or you can follow the instructions you get in an email invitation you will receive from Top Hat. Both options will allow you to purchase the Top Hat subscription and textbook separately. You do NOT need to buy them at the bookstore AND from Top Hat

## Course Evaluation

<b>Midterm test</b>	October 22 120 minutes	28%	<b>Lab reports</b>	November 5 and December 3	2 @ 15% each = 30%
<b>Final Exam</b>	TBA 120 minutes	34%	<b>Top Hat lab participation</b>	Ongoing	3%
<b>Top Hat Homework</b>	Ongoing	5%			

## Test and Exam

The midterm test and final exam will be administered as Quercus quizzes. If you have a conflict with the midterm time (e.g. different time zone), please contact the instructor to set up an alternate test time. The exam will be held during the exam period, as set by the registrar. The test and exam will consist of multiple choice and short answer questions. The exam is cumulative and will cover all material from the course.

## Assignments

I intend the assignments to give you an opportunity to participate in both classic and recent cognitive psychology experiments and encourage you to use the information in the course to think beyond the course material. You will participate in replications of classic cognitive psychology experiments using Top Hat during synchronous online classroom meetings. The point of the assignments is to give you hands on experience both participating in experiments and acting as an experimenter. I will perform simple statistical analyses based on the class data and provide it to you during the next synchronous meeting. You will then be expected to write lab reports based on the class data from 2 of the experiments we will complete throughout the term. Detailed instructions about the lab reports are available on Quercus.

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>)

You may opt out of using the University's plagiarism detection tool to submit your course work, in which case alternative arrangements can be made to support your written work (e.g. providing research notes, etc.). If you intend to opt out, please **inform your Instructor by Friday, September 24** so alternate arrangements can be made.

**Lab report tutorials:** The TAs will hold a series of optional online synchronous tutorials about how to write a good lab report. The tutorials will cover a step-by-step guide about how to write a good lab report. The dates and times of the sessions will be posted on Quercus.

### Top Hat Participation

There are 2 types of Top Hat participation in this course.

The first is related to the experiment participation described above that will contribute to the lab report assignments. There are 6 experiments to participate in throughout the term with each experiment participation worth 0.5%. In order to receive the full 3% participation, you will need to participate in at 5 of 6 experiments (2.5% rounded up).

The second participation component requires you to answer "homework" questions posted on Top Hat after each lecture. Research has demonstrated that a good way to learn material is to be tested on it. With that goal in mind, these homework questions are based on lecture and textbook material and will help as practice questions for the test and exam. Your score will be calculated as the total number of correct answers out of all questions multiplied by 5% (for example, if you get 80 questions correct out of 100 questions asked throughout the term, your score will be 4 points added to your final grade). These homework questions will inform me which areas (if any) need a review during the synchronous class sessions. Therefore, **you must complete the homework questions before each synchronous session (with the exception of the first class).**

### Course Webpage

The website associated with this course is accessible via <http://q.utoronto.ca>

**Note:** You don't need to create a new login for Canvas; it already knows who you are. You just need your UTORid and password. This is the same login that gets you onto the wireless network with your laptop, and the same one that you use to check your email. If you're confused about your UTORid or don't remember your password, go to: <https://www.utorid.utoronto.ca/>

In order to access course material, monitor course information, and view your grades you must log into Canvas. If you have any general questions regarding Canvas, please visit the following help site: <https://library.utm.utoronto.ca/faculty/canvas>

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

#### Email

The main source of communication in the course will be email. You can also send an email directly to me from your Inbox in Quercus/Canvas. Please include the course number (PSY270) in the subject line in all your emails about the course.

**Make sure you check your notification settings in Quercus to ensure you will receive email and announcement notifications**

## **Requests for Re-grading**

Any requests to re-grade tests or experiment reports should be made in a timely fashion. Requests to re-grade term tests must be made before the next scheduled test or exam. Requests to re-grade experiment reports must be made within 1 week of the return of the graded report. **Please direct all requests for re-grading directly to the TA 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.

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

Students who miss a test due to circumstances beyond their control (e.g. illness or an accident) can request that the Department grant them special consideration. Students must present their case to the Department (NOT the Instructor) by submitting a request via the online Special Consideration Request form at:

<https://utmapp.utm.utoronto.ca/SpecialRequest>.

**Important note:** Once the test/exam is available online and you're unable to write or have an approved request to miss, **DO NOT** at any point attempt to access the test/exam. If at any time you access the test/exam, you will **NOT** be able to submit a special consideration and/or your request will be refused.

If your request is approved by the department, a make-up test will be offered. You will receive an email when a make-up date has been arranged. The department will try to give 2-3 days notice of make-up date, however this is sometimes is not possible. **Be prepared for the make-up.**

## **Extension of Time Special Consideration Request Process**

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 term. The decision as to whether or not to apply a penalty for the specified period rests with the Instructor.

Students who seek to be granted more time to complete term work beyond the last day of the term must submit their request directly to the Department. This request covers the period following the last day of classes and ends the last day of the exam period. This is done by submitting a request via the online Special Consideration Request form at <https://utmapp.utm.utoronto.ca/SpecialRequest>. You are advised to seek advising by the departmental Undergraduate Counsellor prior to the deadline.

## **Supporting Documentation**

The University is temporarily suspending the need for a doctor's note or medical certificate for any absence from academic participation. However, you are required to use the Absence Declaration tool on ACORN found in the Profile and Settings menu to formally declare an absence from academic participation. The tool is to be used if you require consideration for missed academic work based on the procedures specific to our campus/department.

## **Missed Final Exam or Extension of Time beyond exam period**

Missed final exams or for extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <http://www.utm.utoronto.ca/registrar/current-students/petitions> and follow their procedures.

## **Penalties for Lateness**

A penalty of 5% per calendar day (i.e., including weekends and holidays, during which students are not able to submit term work) up to and including the last day of classes, will be applied by the Instructor. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counsellor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful.

## **Academic Guidelines**

It is your responsibility to ensure that you have met all prerequisites listed in the UTM Calendar for this course. If you lack any prerequisites you WILL BE REMOVED from the course up until the last day to add a course. Further information about academic regulations, course withdrawal dates and credits can be found in the University of Toronto Mississauga Calendar at: <http://www.erin.utoronto.ca/regcal/>.

You are encouraged to read this material. If you run into trouble and need advice about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Robert Gillespie Academic Skills Centre at 905-828-5406.

## **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 requiring academic accommodations for learning, physical, sensory, or mental health disabilities or medical conditions should contact the AccessAbility Office (2037B Davis Building), 905-828-3847. <http://www.utm.utoronto.ca/accessability/>

## **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 source 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 recording and use of videos in which you appear please contact your instructor.

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. Course materials such as PowerPoint slides and lecture recordings are made available to you for your own study purposes. These materials cannot be shared outside of the class or "published" in any way. Posting recordings or slides to other websites without the express permission of the instructor will constitute copyright infringement.

## **Academic Honesty 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 Mississauga is a strong signal of each student's individual academic achievement. As a result, UTM treats cases of cheating and plagiarism very seriously.

The University of Toronto's Code of Behaviour on Academic Matters outlines behaviours that constitute academic dishonesty and the process for addressing academic offences. Potential offences include, but are not limited to:

### **In papers and assignments:**

1. Using someone else's ideas or words without appropriate acknowledgement.
2. Submitting your own work in more than one course without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment.

### **On tests and exams:**

1. Using or possessing unauthorized aids.
2. Looking at someone else's answers during an exam or test.
3. Misrepresenting your identity.

#### In academic work:

1. Falsifying institutional documents or grades.
2. Falsifying or altering any documentation required, including (but not limited to) doctor's notes.

With regard to remote learning and online courses, UTM wishes to remind students that they are expected to adhere to **the Code of Behaviour on Academic Matters** regardless of the course delivery method. By offering students the opportunity to learn remotely, UTM expects that students will maintain the same academic honesty and integrity that they would in a classroom setting. Potential academic offences in a digital context include, but are not limited to:

#### Remote assessments:

1. Accessing unauthorized resources (search engines, chat rooms, Reddit, etc.) for assessments.
2. Using technological aids (e.g. software) beyond what is listed as permitted in an assessment.
3. Posting test, essay, or exam questions to message boards or social media.
4. Creating, accessing, and sharing assessment questions and answers in virtual "course groups."
5. Working collaboratively, in-person or online, with others on assessments that are expected to be completed individually.

All suspected cases of academic dishonesty 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 citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources.

### **Academic Rights**

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change marks' assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use turnitin.com (you must be offered an alternative form of submission).
- Have access to your instructor for consultation during a course or follow up with the department chair if the instructor is unavailable.
- Ask the person who marked your term work for a re-evaluation if you feel it was not fairly graded. You have up to one month from the date of return of the item to inquire about the mark. If you are not satisfied with a re-evaluation, you may appeal to the instructor in charge of the course if the instructor did not mark the work. If your work is remarked, you must accept the resulting mark. You may only appeal a mark beyond the instructor if the term work was worth at least 20% of the course mark.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth more than 25% in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.

- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

## **Equity Statement**

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 may contact the UTM Equity and Diversity officer at [edo.utm@utoronto.ca](mailto:edo.utm@utoronto.ca) or the University of Toronto Mississauga Students' Union Vice President Equity at [vpequity@utmsu.ca](mailto:vpequity@utmsu.ca).

## **Course Outline**

<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Synchronous virtual class activity</b>
September 10	Introduction, themes and research methods	Chapters 1 and 2	Welcome
September 17	Perception	Chapter 4	Lab report instructions
September 24	Attention	Chapter 5	Experiment 1 participation
October 1	Short-term storage	Chapter 6	Experiment 1 results; Experiment 2 participation
October 8	Long-term memory: Systems and processes	Chapter 7	Experiment 2 results; Experiment 3 participation
October 15	<b>Reading Week</b>		
October 22	<b>Midterm test</b>		Available to answer questions related to taking the test
October 29	Long-term memory in practice	Chapter 8	Experiment 3 results; Experiment 4 participation
November 5	Knowledge I (categories and concepts)	Chapter 9	TBA
November 12	Knowledge II (imagery)	Chapter 9	Experiment 4 results; Experiment 5 participation
November 19	Decision making	Chapter 12	Experiment 5 results; Experiment 6 participation
November 26	Language I	Chapter 10	Experiment 6 results
December 3	Problem solving	Chapter 11	Exam review

\*Please note that the content of chapter 3 (The Brain) will not explicitly be covered, however, we will refer to some brain areas and functions throughout the course so it is your responsibility to ensure you are familiar with the basic ideas covered in the chapter and to complete the assigned homework for that chapter on Top Hat.