

PSY270H5F – Cognition: The Machinery of the Mind

Tuesday 12:00pm – 3:00pm in DV 2072 (Davis Building)

Contact Information

Course Instructor:

Dr. Christine Burton

email: christine.burton@utoronto.ca

Office hours:

Tuesdays 10:30am-11:30am, or by appointment
in DH4025

Teaching Assistants:

Lindsey Thurston

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The TAs will hold office hours after the distribution of graded tests and papers. Dates and times will be posted on Quercus.

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. 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. You will receive an email invitation to join our class on Top Hat. You can either follow the link provided in the email or register yourself at www.tophat.com by entering our unique class Join Code available on Quercus. You only need one account for all your courses that are using TopHat, so if you already have an account for another class, you can follow the registration instructions for our class in the email, but you won't need to set up another account.

Additional readings will be posted on Top Hat.

Course Evaluation

Unit 1 test	Oct 8 120 minutes	22%	Lab reports	November 5 and December 3	2 @ 10% each = 20%
Unit 2 test	Nov 12 120 minutes	20%	In class lab participation	See class schedule below	4%
Final Exam	TBA	34%			

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. During class you will participate in replications of classic cognitive psychology experiments using TopHat. The point of the assignments is to give you hands on experience both participating in experiments and acting as an experimenter. TopHat allows you to participate in psychology replications in class and send real-time data to me using your laptop or cell phone. I will perform simple statistical analyses based on the class data and present it the following class. 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 under the "assignments" tab on blackboard.

We will complete 6 in-class experiments throughout the term. In order to receive the full 4% participation, you will need to participate in at 4 of 6 experiments. An alternate assignment is available for those students who don't have access to a laptop or cell phone. **Please contact me by the end of the 2nd lecture if you will not be using TopHat.**

Lab report tutorials: The TAs will hold a series of optional 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 online where you will be able to sign up for a session.

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>

Green Policy

This is a paperless course! All documents and assignments will be in electronic format only. This includes the written assignments you are to complete for class. Make sure you submit your assignments before class. All grading will be done electronically. Please avoid printing excessively when you can and try to print double-sided whenever possible!

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

I will do my best to answer your emails, but if I think your questions can be better answered in person, I will suggest that we set up an appointment. The same policy applies to emails sent to the TA.

Cell phone and laptop usage

Technology can support student learning, but it can also become a distraction. Research indicates that multi-tasking (texting, surfing the Internet, using social networks) during class time can have a negative impact on learning (Clapp, Rubens, Sabharwal & Gazzaley, 2011; Ellis, Daniels, Jauregui, 2010; Hembrooke & Gay, 2003). Out of respect for your fellow learners in this class, please refrain from using laptops or mobile phones for entertainment during class and 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 Portal, or working on an assigned in-class exercise. Checking social media, email, texting, games, and surfing the Web are not legitimate classroom purposes. Such inappropriate laptop and mobile phone use is distracting to those seated around you and is unprofessional.

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>.

Students are to submit original supporting documentation (e.g., medical certificates, accident reports, etc.) to the Psychology Academic Counselor or drop it in the drop box located outside the Psychology office, Deerfield Hall, 4th Floor. Students have up-to one week from the date of the missed test to submit request. Late submissions will NOT be considered without a letter of explanation specifying and documenting the reasons for the lateness.

Medical certificates or physician's notes must be completed by the Physician and MUST include the statement "This Student [name] was unable to write the test on [date(s)] for medical reasons". This documentation must show that the

physician was consulted within one the day of the missed term test. A statement merely acknowledging a report of illness made by the student to the physician is NOT acceptable. For further information on this procedure please see: <http://www.utm.utoronto.ca/psychology/undergraduate-studies/missed-tests/late-submissions>

If you missed your test/assignment deadline for a reason connected to your registered disability, please be advised that the department will accept documentation supplied by the UTM AccessAbility Resource Centre.

IMPORTANT: The Department of Psychology verifies the authenticity of medical certificates by contacting medical offices. Students are NOT to make any changes or alteration to completed medical certificates. Students who submit forged or altered documentation are subject to severe academic penalties.

If your request is approved by the department, the value of the test will be redistributed to any remaining tests and final examination.

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.**

Original supporting documentation (e.g., medical certificates, accident reports, etc.) must be submitted to the Psychology Academic Counselor or dropped off in the drop box located outside the Psychology office Deerfield Hall, 4th Floor. Students are expected to submit requests to the Department before the last day of the term, unless demonstrably serious reasons prevent them from doing so. In the event of an illness, medical certificates or doctor's notes must confirm that student was ill on the due date of the assignment (for a one-day extension). For a longer extension, documentation must specify the full duration during which academic work could not be carried out.

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>

Penalties for Lateness

A penalty of 10% per calendar day (i.e., including week-ends 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

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/>

Academic Honesty and Plagiarism

Honesty and fairness are considered fundamental to the university's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with -- and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of cheating and plagiarism very seriously. Please take the time to review the Academic Integrity website:

<http://www.utm.utoronto.ca/academic-integrity/students.>

- Common trends in academic offences:
- Plagiarizing/concocted references
- Collaboration/unauthorized assistance
- Purchasing work
- Recycling work - "double-dipping"
- Resubmitting of altered work for re-grading
- Electronic devices (cell phones) or any unauthorized aids
- Altering medical certificates and UofT documents

From the Code of Behaviour on Academic Matters: "It shall be an offence for a student to knowingly: represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism. Wherever in the Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person ought reasonably to have known." All students must refer to this website to obtain information on what constitutes plagiarism.

<http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize.>

If questions arise after reading the material on the website, consult your instructor.

Plagiarism will not be tolerated.

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 or the University of Toronto Mississauga Students' Union Vice President Equity at vpequity@utmsu.ca.

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 25% or more 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.

If questions arise after reading the material on the website, consult your instructor.

Course Outline

	Date	Topic	Readings
Unit 1	Sept 10	Introduction, themes and research methods	Chapters 1 and 2
	Sept 17	Perception	Chapter 4
	Sept 24	Attention and short-term storage In class experiment	Chapters 5 and 6
	Oct 1	Attention and short-term storage In class experiment	Chapters 5 and 6
	Oct 8	Unit 1 test	
Unit 2	Oct 15	Reading Week – No class	
	Oct 22	Long-term memory: Systems and processes In class experiment	Chapter 7
	Oct 29	Long-term memory in practice In class experiment	Chapter 8
	Nov 5	Knowledge I In class experiment	Iachini, T. (2011). Mental imagery and embodied cognition
	Nov 12	Unit 2 test	
Unit 3	Nov 19	Knowledge II In class experiment	Murphy, G. Concepts and categories
	Nov 26	Language	Chapter 9
	Dec 3	Decision making	Chapters 11

*Please note that the content of chapter 3 (The Brain) will not explicitly be covered or tested, 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.

Final exam: During exam period, it is the student's responsibility to be available for the entire exam period.