

# PSY270H1F—Introduction to Cognitive Psychology

# Wednesdays and Fridays 10 am – 1 pm SS 1070

# **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 participation 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

email: christine.burton@utoronto.ca

Office hours via Zoom

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 or in person (SS 4001) Thursdays 2 - 3 pm online only

# **Teaching Assistants:**

Avalon Nisenbaum: avalon.nisenbaum@mail.utoronto.ca

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

The TA will also hold dedicated office hours to answer questions you have about the written assignments before they are due.

#### **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**

**Barenholtz, et al. (2022). Cognitive Psychology, 2<sup>nd</sup> ed. Tophatmonocle Corp.** This textbook is only available through the Top Hat platform. This allows significant savings for students compared to some of the other frequently used Cognition textbooks, and integration of all course materials into one platform.

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

The materials can be purchased as a bundle either through the U of T online bookstore (<a href="https://www.uoftbookstore.com/adoption-search-results?ccid=7562762&itemid=100324">https://www.uoftbookstore.com/adoption-search-results?ccid=7562762&itemid=100324</a>) or directly from Top Hat using the instructions in the email you will receive to your mail.utoronto.ca account. You will need our course **Join Code** (890351) to purchase the materials form Top Hat and to join the course.

Course Evaluation					
Multiple choice	May 23	15%	Top Hat	May 23 and June 17	3%
test			homework		
	60 minutes				
Short answer test	June 11	15%	Top Hat lab	Ongoing	3%
			participation		
	60 minutes				
Final Exam	TBD: June 19-25	34%	Lab reports	June 4 and June 17	2 @ 15% each =
					30%
	120 minutes				

#### **Assessment Details**

Test and Exam (worth 64% of the final course grade)

There will be two term tests and a final exam in this course. Both the test and the final exam will be held in-person. If public health and/or university guidelines change, the test and/or exam may need to shift online. The first term test will consist entirely of multiple choice questions, and the second term test will consist entirely of short answer questions. The final exam will consist of both multiple choice and short answer questions. The final exam will be cumulative and will cover all material from the course.

**Top Hat Participation** (worth 6% of the final course grade)

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

The first is related to the experiment participation described below 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 Top Hat 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 3% (for example, if you get 80 questions correct out of 100 questions asked throughout the term, your score will be 2.4 points added to your final grade). The homework questions are due before the midterm test and the final exam.

#### **Lab Report Assignments** (worth 30% of the final course grade)

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 Top Hat. The point of the assignments is to give you hands-on experience both participating in experiments and acting as an experimenter. Top Hat 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 on Quercus.

To help you prepare your first lab report, you will complete a Lab Report Planning assignment on Top Hat. I have prepared a series of instruction videos about the expectations for each section of a lab report. After watching the videos, you will answer a series of questions about the experiment you plan to write your lab report about. By the end of this planning assignment, you will have a skeleton outline for your first lab report.

All written assignments will be submitted via Quercus. It is your responsibility to ensure that you have submitted the correct file and that it can be opened. After submitting your paper, please double check that is has not been corrupted, that it in written in English characters, and that you didn't submit a paper from a different course. You will be responsible for any late penalties that accrue if you need to submit the correct paper after the due date.

#### **Course Outline**

Date	Торіс	Reading	
May 7	Introduction, themes and research methods	Chapters 1 and 2	
May 9	Perception	Chapter 4	
May 14	Attention In class experiment using Top Hat	Chapter 5	
May 16	Presidential holiday – No class		
May 21	Short-term storage In class experiment using Top Hat	Chapter 6	
May 23	Multiple Choice Test (Lectures 1 – 4) Long-term memory: Systems and processes	Chapter 7	
May 28	Long-term memory: Systems and processes In class experiment using Top Hat	Chapter 7	
May 30	Long-term memory in practice In class experiment using Top Hat	Chapter 8	
June 4	Knowledge	Chapter 9	
June 6	Imagery In class experiment using Top Hat	Chapter 10	
June 11	Short Answer Test (Lectures 5 – 8) Decision making	Chapter 13	
June 13	Decision making	Chapter 13	
June 17 Make-up day	Language	Chapter 11	

<sup>\*</sup>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.

# **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 (PSY270) in the subject line in all your emails about the course. **Please avoid sending me messages directly from Quercus/Canvas because I do not 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), the University's Verification of Student Illness or Injury (VOI) form, or an email from your College Registrar. 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://registrar.utoronto.ca/policies-and-guidelines/verification-of-illness-or-injury/">https://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.

Students who miss final examinations should file a petition for a deferred exam with their College Registrar's Office.

# **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">http://www.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.

# **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.

## **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 (<a href="https://uoft.me/pdt-faq">https://uoft.me/pdt-faq</a>).

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 May 16. 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 <a href="Code">Code of Behaviour</a>
on Academic Matters (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019">1-2019</a>). 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 <a href="A&S Student Academic Integrity">A&S Student Academic Integrity</a> (<a href="https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity">https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity</a>) and the <a href="https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity">https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity</a>) and the <a href="https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity">https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity</a>)

#### **Use of Generative Al**

The use of generative artificial intelligence (AI) tools is strictly prohibited in all course assessments unless explicitly stated otherwise by the instructor. This includes, but is not limited to, ChatGPT, GitHub Microsoft Copilot, AI Tutor and Teacher's Assistant Pro, and open-source models that you have trained and/or deployed yourself. You may not interact with, nor copy, paraphrase, or adapt any content from any generative AI for the purpose of completing assignments in this course. Use of generative AI will be considered use of an unauthorized aid, which is a form of academic misconduct under the Code of Behaviour on Academic Matters.

This course policy is designed to promote your learning and intellectual development and to ensure that our evaluations are a fair and accurate assessment of your learning. Though it may be tempting to use generative AI to assist you when completing your assignments, this will simply inhibit your learning. If the work you submit is essentially the output of generative AI, then what have you learned and what value are you adding? Think of it this way: if a potential employer or supervisor can get as much from an AI tool as what you're able to do yourself, then why should they hire you at all? You should aim to understand course content at a level that far exceeds what an automated tool can achieve. Our course—and in particular, each assignment—is designed to help you attain true mastery of the course content. If you have questions or are stuck, please come to office hours, where we'll be happy to help!

#### **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. https://studentlife.utoronto.ca/department/academic-success/