PSYB57: Introduction to Cognitive Psychology
0.5 credits

University of Toronto, Scarborough
Winter Term, 2022
LEC30 (Online, Asynchronous[1])

Instructor: Prof. Michael Souza (he/him) (note: my surname is pronounced "SUES-uh")
Email: michael.souza@utoronto.ca **(please note: I do not read or respond to Quercus messages)**
Office Hours: *Please see Quercus announcements for virtual office hours information*

Head TA: Ivy Cho
Email: ivy.cho@mail.utoronto.ca **(please note: I do not read or respond to Quercus messages)**
Office Hours: *Please see Quercus announcements for virtual office hours information*

I. Your instructor and Head TA

Dr. Souza is an Associate Professor (Teaching Stream) of Psychology and Neuroscience at UTSC. He received his Ph.D. in Psychology from the University of California, Berkeley in 2010. His teaching interests include cognitive neuroimaging, higher-order cognitive functions, and cognitive impairments and neurorehabilitation.

Ivy is currently pursuing her PhD in Clinical Psychology at UTSC. She previously completed a BSc in Neuroscience at the University of Calgary and an MA in Clinical Psychology at UTSC. Her current research is focused on understanding cognition in older adults and individuals with depression.

II. Course description, pre-requisites and learning goals

Cognitive psychology is a subfield of psychology concerned with the scientific study of mental processes, and how those mental processes give rise to thoughts and actions. With respect to content, the goal of this course is to provide you with a thorough survey of the field of cognition, including coverage in topics such as relevant history and methods, perception and object recognition, attention, memory, visual imagery, language, problem-solving, intelligence and consciousness. With respect to process, this course will introduce you how to conceptualize and concretize questions in cognition, how to deconstruct and answer short-answer questions, and how to approach a primary research article in cognition. Taken together, this course is engineered to provide you with the knowledge and fundamental skills necessary to advance your understanding of cognition.

Prerequisites: PSYA01 and PSYA02

After successful completion of this course, you will have demonstrated an ability to:

1. **Understand** and **describe** why the integration of cognitive psychology and neuroscience helps to promote a more rigorous understanding of human cognitive processes than either field alone might;
2. **Understand** and **describe** the core elements of a range of cognitive science tools and research designs – including strengths/weaknesses – and to **apply** this knowledge to pertinent, novel research questions;

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[1] **ONLINE ASYNCHRONOUS:** A course is considered "Online Asynchronous" if it has no requirement for attendance at a specific time or location for any activities. **For Winter 2022, Term Tests and the Final are expected to be in-person but this may change due to the rapidly changing/evolving circumstances around the COVID-19 pandemic**.

3. **Understand** and **describe** the core tenets of major theories in various domains in cognition (e.g., attention), and to consider how we might **create** experiments to test and **evaluate** these ideas;
4. **Understand** how and why primary research articles are organized the way they are, and to **develop** and **apply** strategies to effectively consume the information contained within them;
5. **Conceptualize** the content units of this course (e.g., attention) as both *integrative* and *hierarchical*;
6. **Identify** and **articulate** the value and contribution of this course to your broader program of study (i.e., Psychology and/or Mental Health Studies, as appropriate).

III. Course textbook

Sinnett, S., Smilek, D. & Kingstone, A. (2016). Cognition (6th edition). Don Mills, Ontario: Oxford University Press. (ISBN-13: 978-0199019700)
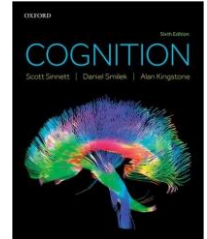
You should NOT use older editions of this book, as this edition has not been compared to previous editions. As such, you may miss out on necessary material for the exams.

IV. Course webpage

Please visit Quercus (https://q.utoronto.ca/) and sign in with your UTORid credentials to access our course webpage. This webpage will house all course-related materials, including announcements, discussion boards, lecture and related learning materials, assessments, and marks. You should expect to visit this webpage a few times per week to ensure you are up-to-date on any new happenings in the course throughout the term.

V. Assessment structure

Your mark in this course will consist of three (3) major assessments:

Midterm Examination I
27% of course grade
Covers lecture and textbook materials from the first four weeks of content

Midterm Examination II
33% of course grade
Covers lecture and textbook materials from the next four weeks of content

Final Examination
40% of course grade
Covers **all** lecture materials, textbook readings from after Midterm 2 **only**, and one assigned journal article (TBA).

Exam scheduling
Please note that all assessments are scheduled by the Office of the Registrar and the dates of these assessments will be communicated as soon as they have been finalized. You must plan to take each assessment at the designated date/time slot that we have been assigned.

Exam structure
All examinations will consist of both multiple-choice (MC) questions and a number of multi-part short-answer (SA) questions. These questions are designed to probe your knowledge of not only course content, but your ability to think and reason with what you have learned in a variety of scenarios.

Each MC question will have five (5) options and these questions may come in various formats, including (but not limited to) questions with diagrams and "all of the above" or "none of the above" options. MC questions will be drawn from both lecture and the textbook.

SA questions will consist of multi-part questions that are broken down to help you structure your thinking. Each question will require a several sentence response, and may also require the creation or analysis of a visual (e.g., diagram). SA questions will be drawn from lecture only. SA questions will be weighted based on relative difficulty (i.e., the challenge/complexity of thought), as opposed to how many things you need to say (i.e., we will not employ a system of five points requiring five "things" to say).

On the whole, there will be more of a focus from lecture (approximately 2/3 to 3/4 of the points on the exam) than the textbook readings (approximately 1/4 to 1/3 of the points on the exam). For superior performance, you will need to develop a clear understanding of both the lectures and the readings. **Take note that rote memorization of lectures and the textbook will <u>not</u> ensure you a high mark**; rather, I expect you to not only learn what things are, but also why they are relevant, and how/why they are used, etc.

Practice questions will be made available for you for each lecture. These sample questions are an invaluable resource for many reasons, including (1) acclimating you to my testing style/expectations, and (2) giving you an opportunity to apply what you've learned in a test-like structure. Please note that while <u>the answers to these questions will not be posted</u>, we strongly encourage you to connect with Prof. Souza and/or your Head TA to discuss the answers <u>after you've tried to work them out</u> to receive positive and/or constructive feedback.

VI. <u>Course policies</u>

Classroom conduct and participation
I work to create an interactive dynamic during my lectures that engages you to think and reflect. I challenge you to use this time to actively engage with the content we are covering, as active learning and immersion in the material will facilitate your ability to think critically about these concepts. I challenge you to structure your time in such a way that you can reasonably space out your learning, as effective skill development requires time, practice, and reflection.

Lecture slides
Lecture materials will be posted on a weekly basis to control the flow of learning and engagement in the course. Lecture slides will be posted in PDF format in two version only (2 slide and 6 slides per page).

You must know that these lecture slides are not a suitable substitute for watching lectures and engaging the materials. Lecture slides alone are not themselves exhaustive, as we will regularly cover important material that extends beyond them during lecture. Know that you are responsible for this material.

Instructional materials are only for the purpose of learning in this course and must not be distributed or used for any other reason whatsoever.

Reading the textbook
The material covered in the textbook is meant to reinforce and complement what we discuss in lecture. At times, we may overlap more with the textbook than at other times. In the spirit of promoting fair and transparent expectations, we will primarily target your practical and conceptual understanding of the bold face terms and figures (and their legends). To be clear, verbatim memorization of course content will not be sufficient here, as the goal of assessments is to tap understanding and/or application, not regurgitation. Finally, it is absolutely reasonable to assume that this is particularly important for terms and figures that were not covered in lecture.

E-mail policy
In most cases, e-mails will be answered within 48 hours of receipt (not including weekends). The email subject should include our course name and nature of the inquiry (i.e., "PSYB57: Question about the Dual Route theory"). The start of your email should include your full name and student ID number so that we know who you are. Emails that you send should contain no more than one question and you should try to explain your current understanding of the concept in the email (which will be affirmed or corrected).

If you are not used to writing emails in an academic context, I encourage you to review this online resource so that you adopt proper email etiquette now and in the future: <<u>https://tinyurl.com/kysxwtx</u>>

Office hours

You should consider visiting Prof. Souza's office hours if you would like to (1) discuss course content (e.g., weekly practice questions), (2) review an issue with course performance or progress, (3) contest a question on an assessment (note: this is a starting place for the process and must occur within two weeks of releasing the marks), or (4) discuss the field of psychology/neuroscience and how to get more involved.

Syllabus changes

There may be minor changes to the syllabus during the term. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to properly prepare for an examination (e.g., reading an extra chapter the week before the Midterm).

Psychology Department Missed Term Work Policy, WINTER 2022

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedures outlined below.

- The following reasons are not considered sufficient for missed term work: travel for leisure, weddings, personal commitments, work commitments, human error.
- Missed Final Exams are handled by the Registrar's Office and should be declared on eService: http://www.utsc.utoronto.ca/registrar/missing-examination
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, you would need to file a petition with the Registrar's Office: https://www.utsc.utoronto.ca/registrar/term-work

Accommodations for Illness or Emergency:

For missed work due to ILLNESS OR EMERGENCY, complete the following **three-step** process:

1. Complete the Request for Missed Term Work Accommodations Form
2. Declare your absence on ACORN (Profile & Settings > Absence Declaration)
3. Email both the Request for Missed Term Work Accommodations Form **AND** a screenshot of your Self-Declared Absence on ACORN to our course point person Dylan Yeates (d.yeates@mail.utoronto.ca) **and** cc the professor (michael.souza@utoronto.ca) **WITHIN 2 BUSINESS DAYS** of the missed work.

Note: If you are unable to submit your documents within 2-business days**, you must still email your instructor within the 2-business day window** to explain the nature of the delay, and when you will be able to provide your documents. Exceptions to the documentation deadline will only be made under **exceptional circumstances**.
Note: For this semester, we do not require any additional supporting documentation (e.g. medical notes) to support your missed term work accommodation request.

Accommodations for Academic Conflicts:

For missed term work due to an ACADEMIC CONFLICT (i.e. two midterms scheduled at the same time), please complete the following process:

1. Complete the Request for Missed Term Work Accommodations Form, choosing "Other" and explaining the conflict in the space provided.
2. Take screenshots of your course homepages that demonstrate the conflict.
3. Email the form and screenshots to our course point person Dylan Yeates (d.yeates@mail.utoronto.ca) **and** cc the professor (michael.souza@utoronto.ca) **at least two weeks (10 business days) before the date of the activity,** or as soon as possible if it was not possible to identify the conflict earlier.

Note: Multiple assignments due on the same day are not considered conflicts. Accommodations may only be possible in the case of quizzes and tests that are both scheduled during the same discrete period. Back-to-back tests/quizzes are not considered conflicts.
Note: Students are responsible for keeping their course timetables conflict-free. Students who choose to register in two synchronous courses with overlapping lecture/tutorial/lab schedules will not be accommodated.

Accommodations for Religious Conflicts:

For missed term work due to a RELIGIOUS CONFLICT, please complete the following process:

1. Complete the [Request for Missed Term Work Accommodations Form](), choosing "Other" and noting "Religious conflict" in the space provided.
2. Email the form to our course point person Dylan Yeates ([d.yeates@mail.utoronto.ca]()) **and** cc the professor ([michael.souza@utoronto.ca]()) **at least two weeks (10 business days) before the date of the activity,** or as soon as possible if it was not possible to identify the conflict earlier.

Accommodations for Students Registered with AccessAbility Services:
For missed *TERM TESTS* due to ACCESSABILITY REASONS:
- **Contact your AccessAbility consultant** and have them email your instructor detailing accommodations required.

For missed *ASSIGNMENTS* due to ACCESSABILITY REASONS:
- If your desired accommodation is **within the scope** of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" and you need 3 days):
  1. Complete the [Request for Missed Term Work Accommodations Form.]()
  2. Email the form and your **Accommodation Letter** to your instructor, specifying how many days extension you are requesting.

- If your desired accommodation is **outside the scope** of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" but you need more time than that):
  1. **Contact your AccessAbility consultant** and have them email your instructor detailing the accommodations required.

Accommodation Procedure:
After submitting your documentation, you will receive a response from your instructor or TA. This form does not guarantee that you will be accommodated. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation. **You are responsible for checking your official U of T email and Quercus course announcements daily**, as accommodations may be time-critical.

For missed assignments, **do not wait for an instructor response to resume work on your assignment.** Extension accommodations may be as short as one business day, depending on the nature of the illness/emergency. You should complete your assignment as soon as you are able and email it your instructor.

For an anticipated event (e.g. scheduled surgery or an illness with a prolonged recovery period), submit a [Verification of Illness Form]() completed by your doctor, AND this form to your instructor if you would like to request accommodations in advance of the assignment deadline or midterm date. **Declare your future absence on [ACORN]() (absences can be declared up to 14 days in the future).**

Missed Accommodations
If an accommodation is granted but a continued illness/emergency prevents you from meeting the requirements of your accommodation, you must repeat the missed term work procedure to request additional accommodations. **Please make it clear in your subject line that you are requesting a second accommodation.** For example, if you are given an extension but are still sick and need more time, or if you miss a make-up midterm, you must submit another request 'Missed Term Work Accommodations' form and declare your extended absence on ACORN. ***Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not be provided.

AccessAbility
Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services as soon as possible.

AccessAbility Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations **416-287-7560** or email **ability@utsc.utoronto.ca**. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Academic Integrity
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. The University of Toronto's Code of Behaviour on Academic Matters (**http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun01 1995.pdf**) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:
- Using someone else's ideas or words without appropriate acknowledgement;
- Submitting your own work in more than one course without the permission of the instructor;
- Making up sources or facts;
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:
- Receiving aid of any form from another person in the context of an examination
- Using or possessing unauthorized aids;
- Looking at someone else's answers during an exam or test;
- Misrepresenting your identity; and
- When you knew or ought to have known you were doing it.

In academic work:
- Falsifying institutional documents or grades;
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes; and
- When you knew or ought to have known you were doing so.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

Note that you may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the *Code of Behaviour on Academic Matters.*

It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust. Students for whom English is not their first language should go to the English Language Development Centre.

If you decide to use these services in spite of this caution, you <u>must </u>keep a draft of your work and any notes you made before you got help and <u>be prepared to give it to your instructor on request.</u>

VII. Resources you will likely find helpful...

(a) UTSC administrative information, academic support, and well-being

Quercus (learning platform for this course)
Important Dates and Deadlines
Academic Advising and Career Centre
Writing Services
AccessAbility
Health and Wellness

(b) Relevant academic programs and opportunities at UTSC

Neuroscience Specialist in Cognitive Neuroscience

Psychology, Mental Health Studies Calendar (course listings, program requirements, etc.)

Chapter of Psi Chi, the International Honours Society in Psychology
Psychology and Neuroscience Departmental Association (PNDA)

Department of Psychology
Psychology lab opportunities (2021-22)
Psychology Experiential Learning opportunities

(c) If you enjoy this course, consider checking out these UTSC faculty and courses below!

Prof. Blair Armstrong	PSYC59
Prof. Jonathan Cant	PSYC51 | PSYC75 | PSYD51
Prof. George Cree	PSYC70 | PSYD52
Prof. Cendri Hutcherson	PSYC57 | PSYD17
Prof. Michael Inzlicht	PSYC19
Prof. Andy Lee	PSYC53 | PSYD55
Prof. Adrian Nestor	PSYB03 | PSYC03 | PSYD54
Prof. Matthias Niemeier	PSYB51 | PSYC52 | PSYD51

PSYB57: Lecture and reading schedule

May be subject to minor revisions with advance notice from the instructor

Week	Dates	Agenda for the day	Relevant details
1	10-14 Jan	**Course intro; foundations of cognitive psychology** *Skills: Strategies for success in this course (and beyond)*	Textbook: Chapter 1
2	17-21 Jan	**Cognitive methods and experimental design** *Skills: Practicing with visual frameworks*	Textbook: Chapter 2
3	24-28 Jan	**Perception and object recognition** *Skills: Navigating exam questions*	Textbook: Chapter 3 (56-81) Chapter 8 (253-60)
4	31-Jan - 04-Feb	**Attention**	Textbook: Chapter 4 (87-112)
-	TBD	**MIDTERM EXAMINATION I**	(see below)
5	07-11 Feb	**Memory systems** *Skills: Reading journal articles (overview, Abstract)*	Textbook: Chapter 5 (125-152)
6	14-18 Feb	**Memory traces and schemas** *Skills: Reading journal articles (Introduction)*	Textbook: Chapter 6
7	21-25 Feb	**READING WEEK (NO CLASS)**	-
8	28-Feb - 04-Mar	**Imagery** *Skills: Reading journal articles (Methods)*	Textbook: Chapter 7 (202-231)
9	07-11 Mar	**Language**	Textbook: Chapter 9 (264-294)
-	TBD	**MIDTERM EXAMINATION II**	(see below)
10	14-18 Mar	**NO CLASS** (study space for Midterm 2)	-
11	21-25 Mar	**Problem-solving** *Skills: Reading journal articles (Results)*	Textbook: Chapter 10
12	28-Mar - 01-Apr	**Intelligence** *Skills: Reading journal articles (Discussion)*	Textbook: Chapter 12
13	04-08 Apr	**Consciousness, "Psychology of Gambling"** **Course review and conclusion**	-
-	TBD	**FINAL EXAMINATION**	(see below)

There are three examinations in this class, and the intended timing for each is indicated above. Midterm and Final exam dates/times are set by the Registrar's office and may occur later (but not earlier) than this timing.

Midterm Exam 1 will cover <u>ALL</u> lecture, skills, and assigned textbook material from weeks 1-4.

Midterm Exam 2 will cover <u>ALL</u> lecture, skills, and assigned textbook material from weeks 5-9.

The Final Exam will cover <u>ALL</u> lectures/skills, the textbook from weeks 11-13; and one article (TBD)