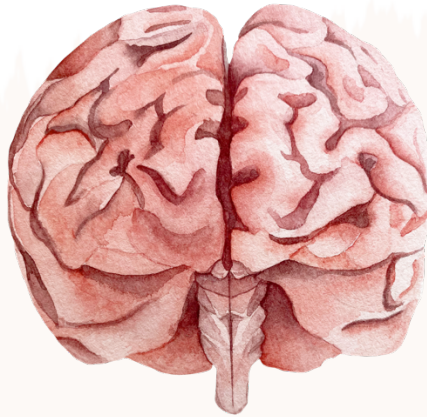


PSY372S LEC0101: Human Memory



Winter 2023 // Mondays from 4PM – 7PM EST // SS2125
Course Website: Quercus (<https://q.utoronto.ca>)

Instructor: Ariana Giuliano [REDACTED]
Office Hours Online by Appointment Only, E-mail to book

Teaching Assistant: Isabella Lim [REDACTED]
Office Hours Online by Appointment Only, E-mail to book

Prerequisites:

PSY201H1/ECO2020Y1/EEB225H1/GGR270H1/POL222H1/SOC202H1/STA220H1/STA238H1/STA248H1/STA288H1/PSY201H5/STA215H5/STA220H5/PSYB07H3/STAB22H3/STAB23H3/STAB57H3

and

PSY260H1/PSYB38H3 or PSY270H1/PSY270H5/PSYB57H3/COG250Y1

Exclusion:

PSY372H5/PSYC53H3

Course Materials (required):

Radvansky, G.A. (2017). *Human Memory* (3rd Edition). New York, NY: Routledge.

NOTE: This textbook is available as a **FREE eBook** through the University of Toronto Libraries Course Reserve (<https://ebookcentral-proquest-com.myaccess.library.utoronto.ca/lib/utoronto/detail.action?docID=4825146>)

Additional assigned readings are listed under the section “Course Materials” – these articles will also be made available on Quercus.

Course Description

Our memories make us who we are; they guide our behaviour in new and familiar situations, help us communicate with others, and offer the basis for our own unique identities. In addition to their practical function in everyday life, the application of memory permeates into much of our society, such as in our educational (e.g., How do we learn best?) and judicial systems (e.g., How trustworthy is eyewitness testimony?).

The goal of this course is to provide a solid foundation on our current understanding of how we learn and remember. We will explore a comprehensive research-based overview of the history, methodology, theories, and debates in the study of human memory.

Important: This course will be held **in-person** in accordance with all public health guidelines. While attending lectures, it is strongly recommended that you wear a mask. In an effort to accommodate all students' needs and concerns during the ongoing COVID-19 pandemic, lectures will be recorded and posted online on Quercus whenever possible, barring any technical difficulties. In order to complete all course assignments and tests, you will need access to a reliable computer and internet connection. More details on technical requirements and suggestions for online learning can be found at <https://www.vicereprovoststudents.utoronto.ca/covid-19/tech-requirements-online-learning/>.

Learning Objectives

In taking this course, you should be able to:

- 1) Demonstrate knowledge about the scientific study of human memory, from both historical and current perspectives.
- 2) Apply your understanding of learning and memory to relevant situations in everyday life.
- 3) Evaluate research in psychological science by:
 - i. Developing an effective method to read and interpret articles.
 - ii. Learning to translate between data and theory.
 - iii. Learning to identify limitations and how they affect our interpretation of the results.
- 4) Think critically and translate this thinking coherently into writing. You will develop these skills by:
 - i. Practicing peer-reviews and learning how to structure constructive criticism.
 - ii. Learning how to critically evaluate your own writing performance.

About Your Instructor

My name is **Ariana Giuliano** (she/her) and I'm a PhD Candidate studying cognitive neuroscience at the University of Toronto and Rotman Research Institute at Baycrest. The focus of my research concerns how using different kinds of general knowledge impacts the expression of memory in the context of aging-related cognitive decline and memory disorders. Feel free to ask me about my research :)

Isabella Lim (she/her) will be your Teaching Assistant during the course. She will be supporting your learning throughout the course by helping to review course content, assessments, and offering studying advice.

Course Requirements

You must have taken PSY201 (or equivalent) and PSY260H1/PSYB38H3 or PSY270H1/PSY270H5/PSYB57H3/COG250Y1 prior to the beginning of this course. You cannot take this class if you have taken PSY372H5/PSYC53H3.

It is your responsibility to ensure that you meet these criteria – if you lack the prerequisites, you will be removed from the course. No waivers will be granted. Please refer to the Psychology section in the University of Toronto Faculty of Arts and Science Calendar for more details.

Course Materials

We will be using the following textbook:

Radvansky, G.A. (2017). *Human Memory* (3rd Edition). New York, NY: Routledge.

This textbook is available as a **FREE eBook** through the University of Toronto Libraries Course Reserve (<https://ebookcentral-proquest-com.myaccess.library.utoronto.ca/lib/utoronto/detail.action?docID=4825146>)

We will also be going over the following assigned readings – all of the following articles can be found on Quercus under “course articles”.

Paper Discussion 1: Long-Term Episodic Memory

Karpicke, J.D., & Roediger, H.L. (2008). The critical importance of retrieval for learning. *Science*, 319(5865), 966-968.

Paper Discussion 2: Autobiographical Memory

Robin, J., Garzon, L., & Moscovitch, M. (2019) Spontaneous memory retrieval varies based on familiarity with a spatial context. *Cognition*. 190, 81-92.

Lecture 7: New Directions In Memory Research

How Sleep Affects Memory

Diekelmann, S., Wilhelm, I., Born, J. (2009). The whats and whens of sleep-dependant memory consolidation. *Sleep Medicine Reviews*, 13, 309-321

Diekelmann, S., Büchel, C., Born, J., Rasch, B. (2011). Labile or stable: opposing consequences for memory when reactivated during waking and sleep

Clinical Neuropsychology of Memory

McAndrews, M.P, Cohn, M., Gold, D. (2020). Infusing cognitive neuroscience into the clinical neuropsychology of memory. *Current Opinions in Behavioural Sciences*, 32:94-101

Bakker, A., Kraus, G. L., Albert, M. S., Speck, C. L., Jones, L. R., Stark, C. E., Yassa, M. A., Basset, S. S., Shelton, A. L., Gallagher, M. (2012). Reduction of hippocampal hyperactivity improves cognition in amnesic mild cognitive impairment. *Neuron*, 74, 467-474.

Memory Schemas + Episodic Memory

Gilboa, A., & Marlatte, H. (2017). Neurobiology of schemas and schema-mediated memory. *Trends in Cognitive Sciences*, 21(8), 618-631.

Tse, D., Langston, R.F., Kakeyama, M., Bethus, I., Spooner, P.A., Wood, E.R., Morris, R.G.M. (2007). Schemas and memory consolidation. *Science*, 316, 76-82.

Zeithamova, D., Dominick, A.L., & Preston, A.R. (2012). Hippocampal and ventral medial prefrontal activation during retrieval-mediated learning supports novel inference. *Neuron*, 75(1), 168-179.

Lecture 8: Tips For Effective Scientific Writing

Gopen, G.D., & Swan, J.A. (1990). The science of scientific writing. *American Scientist*, 78(6), 550-558.

Structure of the Course

Lectures

Lectures are scheduled on Mondays from 4pm-7pm EST in SS2125. I encourage you to take notes and ask any questions you have to clarify and expand on the material covered. You will be responsible for material covered during the lectures for the tests.

Textbook Readings

The textbook is used to supplement the content that is covered in class. Assigned chapters will review or expand on concepts we cover during lectures – there may also be important topics that are not covered in class. To get the most out of this class, I suggest completing all readings before the lecture. You will be responsible for assigned chapters for the tests.

Quercus

PSY372 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. The site is dynamic and new information and resources will be posted regularly as we move through the term, so please make it a habit to log in to the site on a regular (even daily) basis.

To access the course website, go to the UofT Quercus log-in page at <https://q.utoronto.ca>. Once you have logged in to Quercus using your UTORid and password, you should see the link/'card' for our course (you may need to scroll through other cards to find this) – this will allow you to enter our course area, view the latest announcements and access your course resources. There are Quercus help guides for students that you can access by clicking on the '?' icon in the left side column.

Course Communication

E-mail is the best way to reach out to me and your TA. I will try to facilitate as much communication as possible in this course. I encourage you to reach out whether you want to

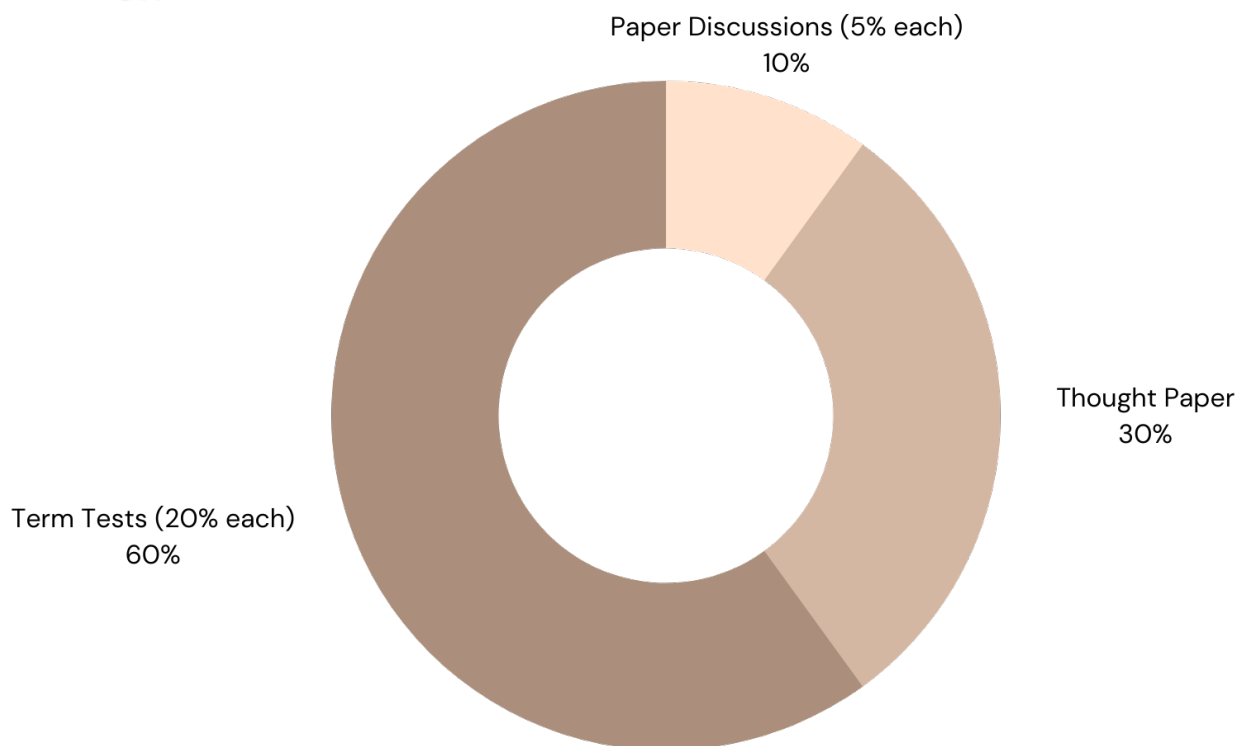
clarify concepts you're having difficulty understanding, to further explore topics you're interested in, to ask questions about the real-world application of the topics we cover, or whether you want to clarify a grading decision.

Most general questions related to course content, policies, or assessments should first be posted to the Quercus Discussion Board. This will help you gain answers and help other classmates that may have the same questions! You are encouraged to both ask and respond to questions on the Discussion Board. Your TA and I will be monitoring the discussion board on a weekly basis.

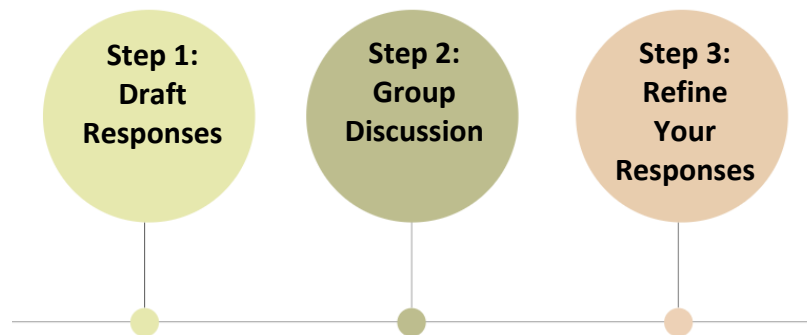
For any issues regarding verification of illness, accessibility concerns, or other concerns specific to the course structure, you can email me directly at [\[redacted\]](#)

For all forms of communication, please explain your situation as clearly as possible in complete sentences. When emailing myself or your TA, please include "PSY372" in the subject line. Please allow up to 48 hours for a response. Some points in the term are busier than others and I will always try my best to communicate if email responses will be delayed beyond the 48-hour period, so please continue to consult the syllabus, course website, and discussion board to see if your question has already been answered. If the matter you are communicating is urgent (i.e., true emergencies) please put "urgent" in the subject line and we will prioritize a response.

Course Assessments & Assignments



Paper Discussions – 10% (5% each)



At the beginning of the term, you will be assigned to a paper discussion group that will meet either synchronously (in-person or videoconference) or asynchronously (Quercus discussion board set up for your group). 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 using the QALMRI method. It will be submitted individually, but it should be informed by your group discussion.

Submission of your paper discussions will be done in 3 steps:

Step 1: Draft responses (worth 1/5 marks)

You will individually read the paper and write a draft of your responses to the QALMRI questions. These will be marked for completion, within reason. You do not need to worry about writing full sentences at this point; 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: Group Discussion

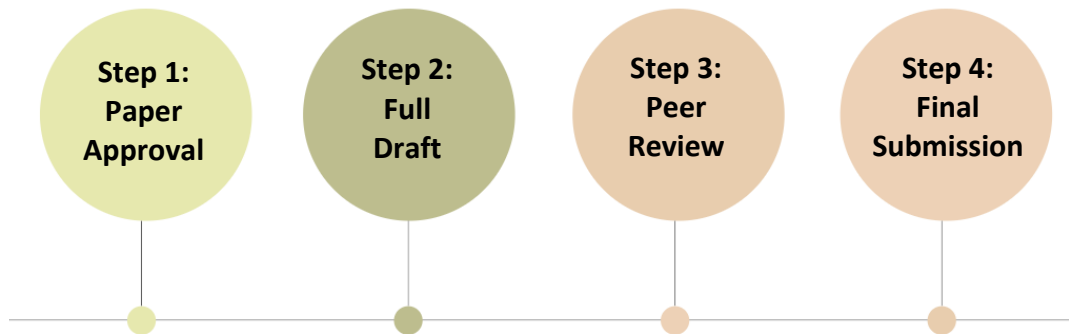
Bring your draft responses (as well as any questions or comments you may have) to your group and discuss. All group members need to participate in the discussion. Be sure that you use this time to clear up any confusion you have about the paper. You should allocate about 1 hour for this if you are participating synchronously.

Step 3: Refine your responses (worth 4/5 marks)

Submit an updated version of the assignment on Quercus that has your refined responses, using 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). The assignment will be marked for both quality of content and writing style; although short, this is a formal writing assignment and so you should use complete sentences. A brief feedback survey will be required when assignments are submitted and those who did not participate in the group discussion will lose points.

Thought Paper – 30%



The thought paper is focused on critically evaluating empirical research. The thought paper will be based on the topic of *memory schemas* (see articles under “course materials” for an introduction on this topic). You should focus on a recently published empirical articles (i.e., not a review paper, chapter, or book) that was published in the last 3 years. For quality control, 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-human animals. You should choose one article as the focus of your paper, but you should cite a minimum of 4 additional articles to back up any claims you make. There are no restrictions on these articles. For full marks, references will go beyond articles assigned for class. Your paper should be approximately 1500 words (6-8 pages; 8 pages max).

Your thought paper should include:

1. A summary of the primary article and how it relates to the assigned topic. This should include a brief and concise description of the article. When describing a study, you should focus on its rationale, aims, methods, results, and conclusions. No more than one full page is recommended.
2. A commentary or critique of the article that expresses your thoughts on the topic, not just a regurgitation of the study’s findings. This section is more open-ended and may involve: (i) relating the findings to other research articles, (ii) linking it to a “real-life” situation and/or discussing the scientific implications for the real world, (iii) describing what you found particularly interesting, (iv) stating whether you were convinced by the results, or (v) describing any limitations of the studies. It does not have to be a negative commentary: you may discuss strengths and/or weaknesses of the study. Finally, we

expect you to propose a direction for future research, as this is an excellent way to situate the current study in the broader literature and demonstrate a deep understanding of the issues at stake.

Submission of your thought paper will be done in 4 steps:

Step 1: Paper approval (optional)

You can submit your chosen article on Quercus to confirm whether it meets the requirement for the assignment.

Step 2: Full draft (worth 5/30 marks)

You will individually read your paper and write a full draft of your thought 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 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.

You also need to provide **two** points to help focus your peer reviewer (see below). This will give you some time to critically reflect on your own work and ensure you get feedback on what you think you need the most help with. For example, there may be a particular section that doesn't flow as well as you'd hoped, you may want some help with making your writing more concise, you may want feedback on the clarity of your introduction, or you may want to make sure that your understanding of a certain concept is correct. This is of course not an exhaustive list of all the things you may want some help with, but please ensure that whatever you're asking is feasible for your peer reviewer. For example, do not ask your peer reviewer to re-write an entire section or to fact-check your entire paper. Before picking your two requests, ask yourself how much time it would take and whether you would be willing to do this for someone else's assignment.

Step 3: Peer Review (worth 5/30 marks)

You will then review one of your peer's submitted drafts where you will be rating and providing comments or suggestions to improve their paper. In addition to your chosen focus of the peer review, **you must address the two questions from your peer-reviewee**. Your peer review will be marked for content and collegiality. You will also receive a peer-reviewed version of your draft to refine your paper for the final submission.

Step 4: Final Submission (worth 20/30 marks)

Submit the final version of your thought paper that has been refined to consider the feedback you received in your peer review. 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_2023W_[lastname]_paper.pdf, where [lastname] should be replaced with your last name. The evaluation of this section of the thought 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. Prior to the thought paper deadline, there will be a lecture which includes a discussion of effective scientific writing.

Tests – 60% (20% each)

There will be a total of 3 term tests (worth 20% each). Each of these tests will consist of multiple choice, short answer, and long answer questions. Tests are **non-cumulative** and will primarily cover material from the three lectures prior to the test. However, some questions will require integration of material covered across the course, so don't forget what you've learned! The questions are designed to not only test your knowledge of the course material, but also your ability to apply the concepts in novel situations.

Tests will be timed (i.e., you will have 3 hours to complete them), but you will have flexibility as to when you will begin them – specifically, they will be made available to start on Quercus for 24 hours starting from class time (Monday at 4pm EST). These tests will be open-book– this does not mean open-classmate, open-google, etc. These are individual assignments, and you are expected to follow the University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>).

I will be available for contact via email from 4pm – 7pm EST the day of the test for you to ask any clarification questions – email response may not be as quick outside this time. If you want a space to write your test, tests can be taken in-person in our classroom during our regularly scheduled class time. I will be there in-person to answer any clarification questions you may have.

Course Schedule & Important Dates

Week	Date	Topic	Readings	Assignment
1	January 9 th	○ Course Intro ○ Overview of history of memory research ○ Neuroscience of memory ○ QALMRI method	Chapters 1-2	Group Discussion Survey & Check-in Survey # 1 (see lecture 00)

2	January 16 th	○ Memory research methods ○ Sensory and short-term memory ○ Working memory	Chapters 3-5 Karpicke & Roediger, 2008	Paper Discussion 1 (Karpicke & Roediger, 2008) Draft due: January 23 rd @ 11:59pm
3	January 23 rd	○ Episodic memory: past and future	• Chapter 7	Paper Discussion 1: Group Meeting between Jan 23 and Jan 29 Paper Discussion 1: Final Submission due January 30 th @ 11:59pm
4	January 30 th	○ Nondeclarative memory ○ Semantic memory	Chapters 6 & 9 Robin et al., 2019	
5	February 6 th	Term Test 1 (material from weeks 1-3)		Paper Discussion 2 (Robin et al., 2019): Draft due February 13 th @ 11:59pm
6	February 13 th	○ Failures of memory ○ Autobiographical memory	Chapters 8, 12, & 13	Paper Discussion 2: Group Meeting – between Feb 13 th and Feb 19 th , Final submission due February 27 th @ 11:59pm
7	February 20 th	Reading Week		
8	February 27 th	○ Amnesia and other memory disorders	Chapter 8, Hassabis et al., 2007	
9	March 6 th	Term Test 2 (material from weeks 4, 6, + 8)		Thought paper: paper approval (optional) – due Mar 13 @ 11:59pm

10	March 13 th	○ Special Topics in modern memory research (+ guest lecture!)	See “course materials” above	Thought Paper: Draft – due March 20 th @ 11:59pm EST
11	March 20 th	○ Memory across the lifespan: aging and development ○ Tips for effective scientific writing	Chapters 16-17 Gopen & Swan, 1990	Thought Paper: Peer Review – due March 27 th @ 11:59pm EST
12	March 27 th	○ Memory and the law ○ Metamemory * Virtual lecture, no class*	Chapters 14-15	Thought Paper: Final Submission – Due April 3 rd @ 11:59pm EST
13	April 3 rd	Term Test 3 (material from weeks 10-12)		

Accessibility and Course Accommodations

Your well-being is a priority in this class. On the date of the first class of every month, an optional wellness survey will be available for you to fill out on Quercus. While these are optional, I encourage you to fill them out not only as a tool to check-in with yourself, but as a valuable means of communicating if there’s anything I need to be aware of, if there’s anything I need to change about the way the course material is being delivered, and other topics of that nature.

Accessibility Needs

Students of all backgrounds, learning styles, and needs are welcome in this course. If you have any accessibility concerns or require specific accommodations due to an acute or ongoing disability (mental, physical, or otherwise), you are encouraged to register with Accessibility Services (AS) (www.accessibility.utoronto.ca). Registering with AS will ensure that your accessibility needs are communicated to your course instructors and that you will have access to individualized accessibility needs. AS will assess your situation, collaborate with you on an accommodation plan, and provide support in achieving accommodations for your course work. When registered with AS, the details of your condition will be kept private, and your instructor will not reveal that you are registered with AS.

In this course, accessibility requests and concerns will be taken seriously. Should you have any concerns throughout the course concerning accessing course materials, please contact the instructor as soon as possible. Below is a list of course features to consider:

- Instruction is given in English
- Course videos include closed captions and lecture transcriptions are available upon request
- Lectures include both spoken instruction and visual aids (i.e., PowerPoint presentation)
- Content note: this course discusses the nature of neurological decline and disease in detail.

Mental Health and Well-Being

As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These factors have the ability to affect aspects of daily functioning as well as academic performance. All of us benefit from support and guidance during times of struggle. There are many helpful resources available through your college Registrar or through Student Life Programs and Services (<http://www.studentlife.utoronto.ca/>). An important part of your education is learning how and when to ask for help. Please be proactive in informing yourself of available resources and do not hesitate to seek assistance from your Course Instructor to help learn what supports are available.

Religious Accommodation

In this course, every reasonable effort will be made to avoid scheduling tests or other required course activities on religious holy days. Further to University Policy, if you anticipate being absent from class or missing major course activities (e.g., tests, presentations, etc.) due to a religious observance, please let me know as early as possible, and with sufficient notice (at least two weeks), so that we can work together to make other arrangements.

Accommodation for Personal Reasons

We are all human and sometimes personal matters and emergencies interfere with our ability to submit course requirements in a timely manner. Should you run into any non-medical emergencies, please contact your course instructor as early as possible. 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.

Course Policies

Academic Misconduct

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. To learn more about how to cite and use source material appropriately and for other writing support, see the UofT writing support website at www.writing.utoronto.ca/. Consult the Code of Behaviour on Academic Matters for an outline of the University's policy and expectations. For more information, please see <http://www.artsci.utoronto.ca/osai> and <http://academicintegrity.utoronto.ca/>. Potential offences include, but are not limited to:

- Copying material word-for-word from a source (including lecture and study group notes) and not placing the words within quotation marks.
- Using someone else's ideas or words without citing the appropriate sources.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Including references to sources that you did not use.
- Lending your work to a classmate who submits it as their own without your permission.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.
- Falsifying or altering any documentation required by the University, including doctor's notes.
- Falsifying institutional documents or grades.

To remind you of these expectations and help you avoid accidental offences, you must include a signed Academic Integrity Checklist with your term tests and term paper (found on Quercus under "files"). If you do not include the statement, your work will not be graded.

Missed Tests

Every reasonable effort should be made to ensure completion of all 3 tests. There will be no make-up tests. Without acceptable documentation or reasoning, you will receive a grade of 0 on missed 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. Legitimate excuses include a documented family emergency or severe illness making it impossible to take the test. If any tests are missed due to illness, you must declare your absence using ACORN's absence declaration system. You have 1 week to declare your absence from the date of the missed test. If you miss the test due to the illness or loss of a close relative, you must provide documentation (e.g., a letter from your registrar). Please contact your course instructor as soon as possible should any conflicts arise.

Late and Extension Policy

Except in the case of an emergency (outlined above), all course assignments must be submitted in a timely manner. Late assignments will be docked 5% for each day past the due date. Please contact me (Ariana) to request an extension should you need one for any of the reasons outlined in previous sections of the syllabus (e.g., family emergencies, severe illness, mental health concerns, other personal reasons, etc.).

Disputing Your Grade

If you think your assignment has been incorrectly marked, you can request an assignment regrade. To request a regrade, you must complete the following steps:

- 1) Contact your TA explaining where in your assignment you should have received more marks and explain your reasoning in reference to the assignment guidelines. You must contact your TA **within 2 weeks** of receiving your grade.
- 2) Review your assignment with your TA.
- 2) If you still wish to contest your grade, contact your course instructor **within 1 week** of your review meeting. After regrading, your new grade will be your final grade regardless of if it is higher or lower than the original grade.

Audio Recording and Lecture Materials Usage

Recordings are only for personal use and may not be shared with other students or distributed online unless permission is granted. Note that your participation may be recorded on audio and made available to students in the course for viewing remotely after each session.

Materials provided by me and your TA (including, but not limited to, the syllabus, lecture slides, handouts, recordings, etc.) are to be used by yourself and the other class members only. They are not to be posted in any public access forum or otherwise distributed without explicit permission from your instructor. Non-compliance with these terms violates an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary action under the Code of Student Conduct.

University's Plagiarism Detection Tool

Students will be required to submit their course essays to the University's plagiarism detection tool for review of textual similarity and detection of possible academic misconduct (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/dt-fag>).

Harassment and Discrimination

The University of Toronto supports a diverse group of students, faculty, staff, and volunteers and as such, it is imperative that we uphold a safe learning environment for all individuals. Discrimination or harassment on the basis race, religion, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status, disability, receipt of public assistance or record of offences will not be tolerated.

Resources

Accessibility Services

Students with diverse learning styles and needs are welcome in this course. If you have an ongoing disability issues or accommodation need, you should register with Accessibility Services (<http://accessibility.utoronto.ca>) at the beginning of the academic year. Accessibility Services will then assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work.

Course Quercus Page:

<http://q.utoronto.ca>

Writing Resources:

UofT Writing Centre

<https://advice.writing.utoronto.ca/>

Manchester Academic Phrasebank

<https://www.phrasebank.manchester.ac.uk/>

APA 7 Formatting

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html

Research Resources:

PubMed Article Database

<https://pubmed.ncbi.nlm.nih.gov/>

Google Scholar

<https://scholar.google.ca/>

UofT Online Library

<https://onesearch.library.utoronto.ca/>

3D Brain – Help with Anatomy

<https://www.brainfacts.org/3d-brain>

UofT Accessibility Services:

www.accessibility.utoronto.ca

Counselling Services:

<http://www.studentlife.utoronto.ca/hwc>