Cognitive Neuroscience

PSYC 325 | Winter 2025

Course Information

INSTRUCTOR INFORMATION:

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Drop-in Times / Location:	Information available via onQ

TEACHING ASSISTANTS (TAs) INFORMATION:

Names:	Pakhi (pronunciation guide: "PAH-kee"; pronouns: she/her) Tavneen Sandhu (pronunciation guide: "TAV-neen SAND-who"; pronouns: she/her) Em Sundby (pronunciation guide: "EM sun-D-BEE"; pronouns: they/them)
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Drop-in Times / Location:	Information available via onQ

COURSE DETAILS:

Format:	Blended (online activities followed by in-person lectures)
Lecture Times / Location:	Information available via onQ
Prerequisites:	PSYC 221 Cognitive Psychology OR PSYC 271 Brain & Behaviour I
Credits:	3.0

Course Description

"What could be more thrilling than to understand the fundamental mechanisms that underlie human experience; to understand in essence, who we are?"

– Dr. Nancy Kanwisher
Professor of Brain & Cognitive Sciences at MIT
Investigator of the McGovern Institute for Brain Research

How does a 3lb bundle of neural tissue allow us to perceive, attend to, feel, and think about the world around us? This question is central to the field of cognitive neuroscience, which bridges together physiological psychology, neuroscience, cognitive psychology, & clinical neuropsychology to link the tangible structure of our brain to the intangible concepts of the mind.

This course will cover foundational knowledge about our neural system (e.g., its organization, interconnectedness, functioning) & our cognitive processes (e.g., perception, attention, memory, consciousness), with a critical focus on the cutting-edge techniques and patient case studies that allow us to understand the architecture of cognition.

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1. Land Acknowledgement

Queen's University currently occupies traditional Anishinaabe and Haudenosaunee territory. We acknowledge this traditional territory to recognize its longer history as one that predates the establishment of the earliest European colonies and recognize its significance for the Indigenous Peoples who lived and continue to live upon it and whose practices and spiritualties are tied to the land and continue to develop in relationship to the territory and its other inhabitants today. Indigenous communities in Kingston / Katarokwi continue to reflect the area's Anishinaabe and Haudenosaunee roots, and there is significant Métis community and First Peoples from other Nations across Turtle Island present here today.

This land acknowledgement has been included in this syllabus not to absolve Queen's University of any of its prior and current wrongs, but to recognize that colonialism does not exist in the past or in a historical context. It is an ongoing process, and as members of the Queen's community, we have a responsibility to understand the longstanding history that has brought us to reside on this land and to build our mindfulness of our place within that history. As we continue to work towards justice in solidarity with Indigenous Peoples, and all those whose land, labour, and knowledge has been unjustly stolen or marginalized, I invite you to:

- Learn more about the final report of Queen's Truth and Reconciliation Commission Task Force detailing how members of the Queen's community can play an active role in relationship building, changing perspectives and policy, and promoting an awareness of the rights, histories, and contemporary issues of Indigenous Peoples.

- Explore the website Stones Kingston to learn about the various cultural communities that have been a part of the city and have contributed to its history over the years.

2. Statement on Equity, Diversity, & Inclusivity

The values of equity and diversity are vital to and in harmony with Queen's University's educational mission and standards of excellence. It acknowledges that direct, indirect, and systemic discrimination and violence exists within our institutional structures, policies, and practices and in our community. This discrimination and violence can take many forms and works to differentially advantage and disadvantage persons across social identities such as race, ethnicity, disability, gender identity, sexual orientation, faith, and socioeconomic status, among other examples.

In this course, it is my goal to ensure that all students across all backgrounds have an ideal learning experience where they feel heard, valued, respected, and welcome. I firmly believe that we are stronger and better equipped to solve problems when we work on them together, and I aim to promote an anti-discriminatory, anti-racist, and accountable environment during our time together. As such, I will not tolerate discrimination or violence of any kind against any member of the course, and I expect every student to show respect for every other member of the course.

3. Contacting the Teaching Team

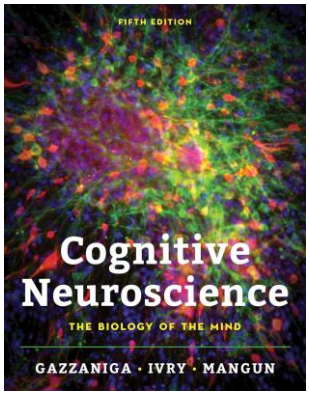
Your Instructor and Teaching Assistants are committed to supporting your success in this course. Although we would ideally love to answer each question individually, given the large volume of emails with a course this size, it is impossible to do so. Therefore, the following policies are recommended to increase efficiency and access to information:

- If you have a **question related to the course format**, consult the syllabus as your first step. You may find that many of your questions can be answered this way.
- If you have a **question related to the course content**, post this on the Discussion Board via onQ so that all students can benefit from the answer. The Teaching Team will be monitoring these boards and we will usually reply on weekdays within a 24-48hr timeframe. Since these boards are public, all students are encouraged to chime in with answers as a way of reinforcing your own understanding of the course.
- If you have a **question related to academic considerations or accommodations**, reach out to our Accommodations Coordinator at their specific email.
- If you have a **question that applies only to you or that you would prefer to discuss privately**, contact the Teaching Team at our respective emails and we will usually reply on weekdays within a 48-72hr timeframe. Ensure that you use your Queen's email address and include "PSYC325" in your subject line to facilitate a quicker response.

4. Course Materials

This course has the following required textbook and supporting material:

Name: Cognitive Neuroscience: The Biology of the Mind
(including ZAPS digital resources)
Edition: 5th
Authors: Gazzaniga, M.S., Ivry, R.B., & Mangun, G.R.
Publisher: W. W. Norton & Company



For New Purchase: Queen's Campus Bookstore
Cost: For Softcover (ISBN-13: 978-0393667806): CAD $167.50
For eBook (ISBN-13: 978-0393667851): CAD $92.95

Alternate Availability: Queen's Library, 1 copy on reserve
Used copies (separate purchase needed for ZAPS digital resources through publisher)

Please note that this course was built on the 5th edition of the textbook, so prior editions are not guaranteed to sufficiently cover the course content.

5. Course Learning Goals

There are five overarching learning goals for this course:

1. Understand and describe the **structure & functioning of the brain as it relates to cognitive processes** such as perception, attention, memory, and consciousness.
2. Understand and describe why **the integration of cognitive psychology & neuroscience** helps to promote a more rigorous interpretation of cognitive processes.
3. Evaluate the **utility of patient case studies** for crafting theories on cognitive processes.
4. Compare and contrast the strengths & weaknesses of **neuroimaging, neurophysiology, and neuroanatomy tools** for developing novel research questions about cognitive processes.
5. Improve critical reading, thinking, analytical, and writing skills and demonstrate this **depth across scientific and public spheres**.

6. Course Assessment Methods

To evaluate your progress across the five overarching learning goals, the following assessment methods will be used during the course:

Assessment Method	Weighting	Due Dates
In-Person Lectures	-	-
Online Activities	18%	Sundays at 4pm, before the scheduled lecture
In-Class Exam #1	20% or 30%	Wednesday, January 29th at 4pm
In-Class Exam #2	20% or 30%	Wednesday, March 5th at 4pm
Course Reflection	2%	Sunday, April 13th at 4pm
Final Exam	30%	[During Final Exam Period]
Feedback Activities	-	[As needed]

In-Person Lectures

Each week, we will meet on Wednesdays from 4pm to 5:30pm EST for our in-person lectures. Week 1 will provide an in-depth overview of the course and introduce you to the field of cognitive neuroscience. Week 2 will act as a refresher to topics covered in Cognitive Psychology (PSYC 221)

and Brain & Behaviour I (PSYC 271), before we delve into the historical context of cognitive neuroscience in Week 3. Weeks 5 to 7 and Weeks 9 to 12 will then focus on a different cognitive process from the perspective of what we know and what patient case studies add to this foundational knowledge base.

Each week, chapters from the textbook will be assigned to facilitate your understanding of the topic being covered that week. The reading schedule is included in the Course Timeline below. It is highly recommended that you read the assigned chapters before attending lectures to facilitate your understanding of the topic. I also highly encourage you to not fall behind your reading schedule since chapters can build upon one another as the course progresses.

Your presence and participation in lectures (through active engagement, class discussion, and in-person surveys) will contribute to the knowledge and skills you will develop in this course. Although you are expected to attend lectures in person every week, **no marks will be provided for your attendance**. If you miss a lecture, I will assume it is for a good reason. However, do note that in-person lectures will not cover all of the material in the textbook and can sometimes cover material that does not overlap with the textbook at all. This is designed to be a feature of the course, as the added material will help clarify the links between different aspects of cognitive neuroscience and provide you with the broad questions we grapple with when trying to understand the architectural basis of cognition. Therefore, if you do miss a lecture and want further insight into the topic being covered that week, I highly recommend reaching out to other students on the Discussion Board via onQ or identifying students in the course who can share their notes and thoughts with you.

Online Activities [18%]

As a blended course, each week, we will be balancing in-person lectures with various online activities to give you a variety of formats that can help you learn more about the cognitive process being covered that week in a flexible and interactive manner. The online activity schedule is included in the Course Timeline below. These online activities will take the form of:

- ZAPS digital resources: In this online activity, you will participate in hands-on labs that have been inspired by classic studies in cognitive neuroscience. This will be a wonderful way for you to experience research through interactive experiments, as the labs will walk you through cognitive processes from a real-world context, show you how we collect data, and connect your findings to that of your peers. Each ZAPS will also provide you with learning check questions to help solidify your understanding of the topic.

In addition to ZAPS, online activities can also take the form of:

- Videos: In this online activity, you will be asked to watch video interviews or public-speaking presentations from contemporary scientists who work in cognitive neuroscience. This will be a great opportunity for you to hear from people who work in the field today and contextualize their work within the content of the course.

- Case studies: In this online activity, you will be presented with case studies from patients who have impairments in specific brain regions, leading to deficits and/or changes in their behaviour and performance. This will be a fantastic way of gaining a deep and comprehensive understanding about symptomology and clinical presentation within patient studies that inform us about how various brain regions support different aspects of cognitive functioning.

Online Activities will be assessed through learning check questions on ZAPS and will be worth 18% of your final grade. There are a total of 9 weeks of Online Activities for the course, and only your **best 6 grades out of a possible 9** will be counted towards your final grade.

You will submit your Online Activities via onQ and they will be due every week on **Sundays at 4pm prior to the in-person lecture** (e.g., online activities for our Wednesday, February 12th lecture will be due on Sunday, February 9th).

In-Class [20% or 30%] and Final [30%] Exams

In this course, we will assess your learning through two in-class exams and one final exam. Each exam will be non-cumulative such that it will only cover material from the last exam. That is, In-Class Exam #1 will cover all material from Weeks 1 to 3, In-Class Exam #2 will cover all material from Weeks 5 to 7, and the Final Exam will cover all material from Weeks 9 to 12.

Exams will take the form of multiple choice, fill-in-the-blanks, diagrams, and short-answer questions, though more detailed instructions will be provided during lecture and via onQ. In-Class Exams #1 and #2 will account for a total of 50% of your final grade, such that the better exam grade will be given the higher weighting. The Final Exam will be worth 30% of your final grade.

In-Class Exam #1 will take place during lecture time on **Wednesday, January 29th from 4pm – 5:30pm** and In-Class Exam #2 will take place during lecture time on **Wednesday, March 5th from 4pm – 5:30pm**. The Final Exam will occur during the scheduled Final Exam Period:

- Location & Timing of Final Exam: Once the exam schedule has been finalized, the exam date will be posted on your SOLUS account. The exam dates for each term are listed on the Faculty of Arts and Science webpage under "Important Dates". Student exam schedules are posted on SOLUS for the Fall Term immediately prior to Thanksgiving and for the Winter Term on the Friday before Reading Week. Students should **delay finalizing any travel plans until after the examination schedule has been posted**. Exams will not be moved or deferred to accommodate employment, travel/holiday plans, or flight reservations. For information regarding what is considered extenuating circumstances and qualifications for Academic Consideration, please visit the Faculty of Arts and Science's Academic Consideration webpage. If you are unable to attend an exam and receive approval for a deferred proctored exam, a further deferral of that exam will not be accommodated.

Course Reflection [2%]

At the end of the course, as you decompress from the semester, it can be useful to reflect on the knowledge gained, skills developed, and learning process experienced across our weeks together, as a way of documenting your growth as a scholar. I often find that this long view helps crystallize what stood out most to you in the course and how you might use what you learned in the future.

At the end of Week 12, you will be asked to submit a course reflection on whether your perspective or understanding of cognitive neuroscience has been changed, challenged, reinforced, or deepened in this course. I encourage you to think about whether you encountered any high points or challenging moments, and you can use this as a starting point for your course reflection. There are no right or wrong answers. What you choose to focus on is up to you.

The course reflection is meant to be a short summary (i.e., **150-250 words**). You will submit your reflection via onQ **before Sunday, April 13th at 4pm**.

Feedback Activities

At various points over the course, I may ask you to take part in in-person or online feedback activities, such as surveys or questionnaires. This feedback will give me a real-time sense for how things are progressing in the course, which I can use to clarify specific topics or improve the overall structure of the course for future cohorts.

All feedback activities are optional, so **no marks will be provided for your response**. You may submit your feedback in person during lectures or online via onQ **when prompted**.

7. Course Assessment Flexibility

Assessment methods in this course have been designed with flexibility for academic consideration for all students:

- For Online Activities, students can take an additional 3 days to complete these assessments if required, with no need for academic consideration or accommodation. This 3-day "grace period" ends on Wednesdays at 4pm. In addition to the 3-day extension, there are 10 weeks of in-person lectures, of which there will be 9 weeks where Online Activities will be graded. In these instances, only your top 6 grades will count towards your final grade in the course. This allows for 3 weeks where, if the grace period is not sufficient, you do not need to submit work.

- For In-Class Exams, all students can miss 1 exam provided they have appropriate academic consideration or accommodation. If so, the remaining exams will then each

count for 40% of the final grade (i.e., 40% for In-Class Exam, 40% for Final Exam). Students are not permitted to miss 2 exams without penalty.

- For Course Reflection, students can take an additional 3 days to complete this assessment if required, with no need for academic consideration or accommodation. This 3-day "grace period" ends on Wednesday, April 16th at 4pm.

These flexible design features means that "Short term Requests for Academic Consideration" (submitted through the Faculty of Arts and Science portal without documentation) are not needed and long-term requests will be handled on a case-by-case basis, if needed.

8. Course Calendar

All important course dates have been highlighted on the calendar below, though please visit the Faculty of Arts and Sciences Sessional Dates website for all academic deadlines.

January

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

March

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

April

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

In-Person Lectures | Online Activities | In-Class Exam | Course Reflection | Final Exam Period

9. Course Timeline

Note: Our course timeline might be subject to change. In particular, there may be a short-term change to online lectures, alterations to the reading list, and/or substitutions or additions to the list of online activities if required. Any changes will be announced in advance during in-person lectures and via onQ.

#	Week & Topic	Readings	Online Activities
Core Topics			
1	Jan 8th **An Introduction to Cognitive Neuroscience**	• Syllabus	
2	Jan 15th **A Refresher on Cognition & Neuroscience**	• Chapter 2: Structure & Function of the Nervous System (sections 2.1 to 2.6) • Chapter 3: Methods of Cognitive Neuroscience	• ZAPS: Attentional blink • VIDEO: A neural portrait of the human mind • VIDEO: What is so special about the human brain?
3	Jan 22nd **The History of Cognitive Neuroscience**	• Chapter 1: A Brief History of Cognitive Neuroscience	• ZAPS: Measuring intelligence • ARTICLE: Human endeavor, human biases • VIDEO: Textbook -- Foundations of cognitive neuroscience • VIDEO: How does the brain work in everyday situations?
4	Jan 29th **In-Class Exam #1**	• Covering material from Weeks 1 to 3	
Basic Cognitive Functions			
5	Feb 5th **Visual Perception**	• Chapter 5: Sensation and Perception (sections 5.1, 5.6, and 5.7)	• ZAPS: Ponzo illusion • VIDEO: Do we see reality as it is? • CASE STUDY: Blindsight • CASE STUDY: Seeing beyond the visual cortex
6	Feb 12th **Attention**	• Chapter 7: Attention	• ZAPS: Selective attention • VIDEO: What happens in your brain when you pay attention? • VIDEO: How to tame your wandering mind • CASE STUDY: Patient with right hemispheric stroke

	Winter Reading Week – NO CLASS		
7	Feb 26th **Brain Plasticity**	• Chapter 2: Structure & Function of the Nervous System (section 2.7) • Chapter 5: Sensation and Perception (sections 5.4 and 5.9) • Chapter 8: Action (sections 8.1, 8.5, and 8.6)	• ZAPS: Visual search • VIDEO: Textbook -- Language, Plasticity, and the Brain • VIDEO: The brain may be able to repair itself – with help • VIDEO: You can grow new brain cells • CASE STUDY: Phantom limb
8	Mar 5th **In-Class Exam #2**	• Covering material from Weeks 5 to 7	
Higher-Order Cognitive Functions			
9	Mar 12th **Memory**	• Chapter 9: Memory	• ZAPS: Memory span • VIDEO: Textbook -- Multiple systems of memory • VIDEO: How reliable is your memory? • CASE STUDY: The case of Henry Molaison • CASE STUDY: Patient with amnesia
10	Mar 19th **Executive Function**	• Chapter 12: Cognitive Control	• ZAPS: Stroop effect • VIDEO: Textbook -- The Frontal Lobes and Cognition • VIDEO: How your brain's executive function works • VIDEO: Your brain on video games
11	Mar 26th **Social Cognition**	• Chapter 6: Object Recognition • Chapter 13: Social Cognition (sections 13.1, 13.2, 13.3, 13.5, and 13.7)	• ZAPS: Face perception • VIDEO: How we read each other's minds • CASE STUDY: Prosopagnosia • CASE STUDY: Face blindness
12	Apr 2nd **Consciousness**	• Chapter 4: Hemispheric Specialization • Chapter 14: The Consciousness Problem (section 14.10)	• ZAPS: Split brain • VIDEO: Textbook -- The Divided Brain • VIDEO: The illusion of consciousness • VIDEO: Your brain hallucinates your conscious reality • CASE STUDY: Severed corpus callosum • CASE STUDY: Split brain

10. Grading Scheme

All assessment methods for this course are designed to reward your effort, promote your independent discovery, and encourage your growth as scholars. For each assessment method, you will receive a numerical percentage mark, with the final grade being derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Letter Grade	Average Range
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

11. Policy Review of Graded Work

Students who believe grades on their in-class exams were inaccurate should first discuss the grading and feedback with the TA who graded their work. Following this, requests for regrading in-class exams should be emailed to me within 48 hours after you have looked over your exam, but no more than 10 days later. To request a formal regrade, please include the following in your email:

- Your name and student number.
- The feedback you received from your TA during your discussion, and why these discussions did not resolve the situation.
- The specific aspects of your in-class exam that you believe were not sufficiently awarded and an explicit reference to why you believe that your exam meets the criteria for regrading.

If a review of graded work results in only a slightly different grade, the original grade will stand. Should we find an error where marks were not assigned when they should have been or were missed in adding up the total score or were added up incorrectly resulting in a higher score than earned, the grade will be changed so that it is accurate. Grades would only increase or decrease if there was evidence of an error in marking, not simply because the regrader interprets or applies the rubric slightly differently than the original grader.

12. Accommodations for Disabilities

Queen's University is committed to working with students with disabilities to remove barriers to their academic goals. Queen's Student Accessibility Services (QSAS), students with disabilities, instructors, and faculty staff work together to provide and implement academic accommodations designed to allow students with disabilities equitable access to all course material (including in-person lectures as well as exams). If you are a student currently experiencing barriers to your academics due to disability related reasons and you would like to understand whether academic accommodations could support the removal of those barriers, please visit the QSAS website to learn more about academic accommodations or start the registration process with QSAS by clicking *Access Ventus* button at Ventus | Accessibility Services | Queen's (queensu.ca).

VENTUS is an online portal that connects students, instructors, Queen's Student Accessibility Services, the Exam's Office, and other support services in the process to request, assess, and implement academic accommodations. To learn more, go to: https://www.queensu.ca/ventus-support/students/visual-guide-ventus-students. If you have any questions regarding the implementation of your accommodations in this course, please contact:

- **Accommodations Assistant:** Tara Karasewich
- **Accommodations Assistant:** psyc.accom@queensu.ca

13. Academic Consideration for Students in Extenuating Circumstances

Academic Consideration is a process for the University community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student's ability to complete their academics. This may include but is not limited to:

- Short term physical or mental illness or injury (stomach flu, anxiety / depression, mononucleosis, concussion, broken bones, surgery, medical treatments, etc.)
- Traumatic event / confidential (bereavement, serious injury, illness or required treatment for a significant other / family member or a traumatic event such as divorce, sexual assault, social injustice, etc.)

- Requirements by law or public health authorities (court dates, jury duty, requirements to isolate, etc.)
- Significant event (varsity athletic event, distinguished event, serving in the Reserve Forces, etc.)

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances. For more information, please see the Senate Policy on Academic Consideration for Students in Extenuating Circumstances.

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. For more information, undergraduate students in the Faculty of Arts and Sciences should consult the Faculty's webpage on Academic Consideration in Extenuating Circumstances and submit a request via the Academic Consideration Request Portal. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

If you need to request academic consideration for this course, you will be required to provide the name and email address of the instructor / coordinator. Please use the following contact information:

- **Instructor/Course Coordinator Name:** Tara Karasewich
- **Instructor/Course Coordinator Email Address:** psyc.accom@queensu.ca

Students are encouraged to submit requests as soon as the need becomes apparent and to contact the instructor / course coordinator as soon as possible once academic consideration has been granted. Any delay in contact may limit the options available for academic consideration.

For more information on the Academic Consideration process, what is and is not an extenuating circumstance, and to submit an Academic Consideration request, please see the Faculty of Arts and Science's Academic Consideration website.

14. Academic Support

All undergraduate students face new learning and writing challenges as they progress through university: essays and reports become more complex; effectively incorporating research into writing becomes more important; the types of assignments become more diverse; managing your time and developing the skills you need to read and think critically gets more challenging. If you face any challenges in this course, I encourage you to contact Student Academic Success Services (SASS). SASS offers many different ways to receive support:

- Free online or in-person appointments to get personalized support on writing and academic skills from expert staff and trained peers.

- Workshops and drop-in programs. SASS' Events Calendar lists events coming soon.
- Online resources that provide strategies for academic skills and writing development at university.
- If English is not your first language, SASS has specific resources for English as Additional Language students, including weekly programs and EAL academic skills appointments. You can meet on an ongoing basis with an EAL consultant to work on your academic writing, speaking, listening, and reading skills.

15. Academic Integrity

Queen's University is dedicated to creating a scholarly community free to explore a range of ideas, to build and advance knowledge, and to share the ideas and knowledge that emerge from a range of intellectual pursuits. Queen's students, faculty, administrators, and staff therefore all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect, and responsibility, and by the quality of courage. These values and qualities are central to the building, nurturing, and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

The following statements from "The Fundamental Values of Academic Integrity" (2nd edition), developed by the International Center for Academic Integrity (ICAI), contextualize these values and qualities:

- **Honesty:** Academic communities of integrity advance the quest for truth and knowledge through intellectual and personal honesty in learning, teaching, research, and service.
- **Trust:** Academic communities of integrity both foster and rely upon climates of mutual trust. Climates of trust encourage and support the free exchange of ideas which in turn allows scholarly inquiry to reach its fullest potential.
- **Fairness:** Academic communities of integrity establish clear and transparent expectations, standards, and practices to support fairness in the interactions of students, faculty, and administrators.
- **Respect:** Academic communities of integrity value the interactive, cooperative, participatory nature of learning. They honor, value, and consider diverse opinions and ideas.
- **Responsibility:** Academic communities of integrity rest upon foundations of personal accountability coupled with the willingness of individuals and groups to lead by example, uphold mutually agreed-upon standards, and take action when they encounter wrongdoing.
- **Courage**: To develop and sustain communities of integrity, it takes more than simply believing in the fundamental values. Translating the values from talking points into action

– standing up for them in the face of pressure and adversity – requires determination, commitment, and courage.

Students are responsible for familiarizing themselves with and adhering to the Senate regulations concerning academic integrity, along with Faculty or School specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery, and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

Queen's Student Academic Success Services (SASS) offers a self-directed, online academic integrity module, which I encourage all students to take which will help with:

- Understanding the nature of the academic integrity departure
- Understanding the expectations of and role of sources in scholarly writing
- Integrating sources into your writing (paraphrasing, quoting, summarizing)
- Understanding when and how to cite your sources
- Managing your time effectively to avoid the need for shortcuts
- Taking effective notes to ensure accuracy of source material and correct attribution

16. Guidelines for Discussion

Universities are a place to share, question, and challenge ideas. Each student brings a different set of lived experiences, and you are more than welcome to draw on your own experiences to guide your discussion. To create a respectful classroom community that will allow us all to learn from one another, please consider the following guidelines:

- Make a personal commitment to learn about, understand, and support your peers.
- Assume the best of others and expect the best of them.
- Recognize and value the experiences, abilities, and knowledge each person brings to the course.
- Acknowledge the impact of oppression on other people's lives and make sure your words and tone are respectful and inclusive.
- Encourage others to develop and share their ideas.
- Pay close attention to what your peers say / write before you respond. Think through and re-read what you have written before you post anything online or send your comments to others.
- Be open to having your ideas challenged and challenge others with the intent of facilitating growth.

- Look for opportunities to agree with one another, building on and intentionally referencing your peers' thoughts and ideas; disagree with ideas without making personal attacks, demeaning, or embarrassing others.

17. Statement on Generative Artificial Intelligence (AI) Tools

My typical policy on generative AI writing tools like ChatGPT, Scribe, and Jasper has always been that they are not prohibited in my courses, but that students must cite any and all material that these tools generate.

However, in December 2023, the New York Times filed a lawsuit against OpenAI (i.e., the creator of ChatGPT) providing quite compelling evidence that generative AI is directly copying large swaths of text rather than "generating" its own (for more information, see this summary from CBC Business and an excellent perspective from Cecilia Ziniti, a lawyer specializing in issues of Intellectual Property Rights and AI). This is a common "overfitting" problem that can occur in neural networks, and given this information, the use of generative AI writing tools would constitute as plagiarism.

For these reasons, my policy has now changed. For this course, **using generative AI writing tools in your submitted work is not permitted** and its use will constitute a Departure from Academic Integrity. Only original work, completed wholly by you, is expected to be submitted in this course.

18. Statement on Turnitin software

This course makes use of Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assessments via onQ to Turnitin. In doing so, students' work will be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarized text in this course. Data from submissions is also collected and analyzed by Turnitin for detecting Artificial Intelligence (AI)-generated text. These results are not reported to me as your course instructor at this time but could be in the future.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. The similarity report generated after an assignment file is submitted produces a similarity score for each assignment. A similarity score is the percentage of writing that is similar to content found on the internet or the Turnitin extensive database of content. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the authenticity of work as a part of a larger process.

Please read Turnitin's Privacy Policy, Acceptable Use Policy, and End-User License Agreement, which govern users' relationship with Turnitin. Also, please note that Turnitin uses cookies and other tracking technologies; however, in its service contract with Queen's Turnitin has agreed that neither Turnitin nor its third-party partners will use data collected through cookies or other tracking technologies for marketing or advertising purposes. For further information about how you can exercise control over cookies, see Turnitin's Privacy Policy.

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19. Copyright of Course Material

Course materials created by me as your course instructor, including slides, presentations, handouts, assignments, exams, and other similar course materials, are the intellectual property of the instructor. It is a departure from academic integrity to distribute, publicly post, sell, or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale, or other means of dissemination, without the instructor's express consent. Any student who engages in such conduct may be subject to penalty for a Departure from Academic Integrity and may also face adverse legal consequences for infringement of intellectual property rights.