

PSYC 320 Fall 2024

Psychology and Technology: Intersections in Everyday Life

SYLLABUS

Instructor:

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Teaching Team:

Course Description:

This course examines the intersection of psychology and technology, exploring how technological advancements influence cognitive processes, behavior, health, and social interactions. Students will investigate the psychological principles behind technology use, its impact on mental health, and the ethical implications of these innovations. By exploring these topics, students will gain a deeper understanding of the role that technology plays in shaping individual experiences and broader social outcomes.

Land Acknowledgment

I acknowledge that Queen's is situated on traditional Anishinaabe and Haudenosaunee territory. We are grateful to be able to live, learn and teach on these lands. By acknowledging this traditional territory, we recognize its history and its significance for the Indigenous Peoples who lived and continue to live, upon it.

Diversity and Inclusion

In this class, it is my goal to ensure that students have a great learning experience. For this to happen, consistent with the university code, offensive statements that violate university code will not be tolerated. Every student in this class must abide by these policies (i.e. do not make offensive statements); there will be **no tolerance** for any language that targets equity-deserving groups, including but not limited to comments that are racist, homophobic, transphobic, ableist or ageist.

The diversity of experiences that students bring to this class are a resource, strength and benefit. With this, **students in this class are encouraged to speak up and participate** during class meetings and provide perspectives from their own lived experiences (e.g., of minoritization or oppression).

Learning Objectives:

- Apply cognitive and psychological principles to technology use.
- Analyze the impact of technology on mental health and well-being.
- Describe the role of technology plays in shaping social interactions and societal norms.
- Evaluate the ethical implications of technological advancements.
- Develop critical thinking skills through analysis of current research and case studies.

Weekly Structure of the Course

Each week (with some exceptions) has one lecture (Mondays) on a specific topic for that week. The readings and other resources are meant to be read before. On Thursdays, the class will be interactive and seek to explore more deeply the topic of that work. Students will participate in class discussion, work on a group activity or host a guest speaker. The specific activity will change from week to week.

- **Every Monday** (11:30 EST), the class will convene in Kingston Hall room 101 for lectures and other class activities. Pop-quizzes, class discussions and demonstrations will also be part of the class and count towards participation.
- **On Thursday** (1:00 EST), the class can include begin with some visualization and exploration of the data collected in Tuesday's class (no action required by students).
- **On Fridays**, a Reflection paper is due. The paper should reflect a new idea or interesting aspect of the week's topic. These assignments are designed to help prepare students for the midterm and final exams.

Course Evaluation (see below for details)

Reflection Papers	15%*
Group Work/Discussions	15%

Midterm	25%
Final	35%
Class Participation/Pop-Quizzes	10%

**Best 5 out of 6 reflection papers*

Grading

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Grade	Numerical Range	Grade Point Equivalent
A+	90 - 100	4.3
A	85 - 89	4.0
A-	80 - 84	3.7
B+	77 - 79	3.3
B	73 - 76	3.0
B-	70 - 72	2.7
C+	67 - 69	2.3
C	63 - 66	2.0
C-	60 - 62	1.7
D+	57 - 59	1.3
D	53 - 56	1.0
D-	50 - 52	0.7
F	49 and below	0.0

Assessments

Note: Assignments in this course have been designed with flexibility for academic consideration for all students. Details on grace periods, dropping low scores, and alternative options for assignments are included in each assessment below.

Reflection Papers [15%]

Each week during which there is a demonstration (**by Fridays at 23:59 EST**), you will need to submit a response via OnQ. The purpose of these Reflection Papers is to ensure that you have engaged with the readings and lecture materials for that weeks and thought about how the two fit together. It **should not** contain a summary of the week's readings, concepts or demonstration, but rather, it **should** contain some reflection on the broader significance of the content. Beyond this, for example, it could include something that interested you, a potential area of improvement you noticed, an unresolved question, a follow-up experiment idea, or connections to other content in the course. The Reflection Papers should be approximately 150-200 words. This is not a hard limit, but a guideline.

Grading of Reflections is as follows:

- **3/3** – The response demonstrates an ability to analyze, synthesize, and evaluate the week's concepts and demonstration, and gives evidence of original thinking and an extensive knowledge base. The response shows evidence of learning that goes beyond the content.
- **2/3** – The response demonstrates some critical reasoning and an understanding of the week's concepts and demonstration. It is clear there is a solid understanding of the relationship between the two, and between concepts within the content. The student needs to be clearer and more concise in their writing.
- **1/3** – The response shows an acceptable summary of some of the week's concepts or the demonstration. Basic facts and vocabulary are present, but the student needs to engage more deeply with the content and convey ideas with more clarity.
- **0/3** - Incomplete.

There will be 10 weeks in which you can submit a reflection. From those weeks, you can submit up to 6 Reflections and only the top 5 will be counted. Plan which weeks you will submit a paper accordingly.

Universal Accommodations and Late Submissions

The written assignments will have a three-day grace period. That is, your assignments are due on the due date posted, but will be accepted without penalty up to 72 hours afterwards (3 days). After the grace period, the late penalty will be 10% per day for a maximum of 4 days, after which you will receive a grade of 0 (if it one of your 5 graded assignments).

Class Participation [10%]

A number of pop quizzes and polls (on Kahoot) will be used to assess student learning during in-class time. Participation in these activities will be recorded and the grade will be based on the presence of students during these activities. The number of activities will vary from class to class. The accuracy or performance on the quizzes will not be assessed. It is worth 10% of your grade and grading will be based on proportion completed over the course of the semester.

Group Work/Class Discussions [15%]

The course will involve a number of different activities during the Thursday class. Some will classes involve group discussions, others will involve class discussions, and others will have us host a guest speaker that will allow for audience questions. During class and group

activities, submissions of summaries of discussion, questions or other queries will be submitted via onQ. Grades will be based on participation and in some cases, an assessment of the quality of work. In the latter case, the quality of activities will be assessed using same rubric as used for the Reflection Papers.

Midterm Exam [25%]

This exam will take place **during normal class time** on Monday Oct 21st and is worth 25% of your grade. The exam will consist of 3 short answer questions. Two weeks before the exam, students will be given 5 questions based on which they can prepare their answers. Of those questions, 3 will appear on the exam. The exam will cover content for the first 5 topics.

Final Exam [35%]

This exam will take place **during University Final Exam schedule** (Date and time TBA) and is worth 35% of your grade. The exam will consist of 3 short answer questions and one long answer question. Two weeks before the end of term, students will be given 6 SA questions based on which they can prepare their answers. Of those questions, 3 will appear on the exam and be based on the content for the final 5 topics. For the long-answer question, the question will also be provided at that time and students will be expected to provide a comprehensive answer based on topics from the whole term. This question will require students to synthesize and propose a new idea based on course content.

Discussion/Participation Guidelines

University is a place to share, question and challenge ideas. Each student brings a different lived experience from which to draw upon. To help one another learn the most we can from this experience please consider the following guidelines.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you respond. Think through and reread your writings before you post or send them to others.
6. It's ok to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and to challenging others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

Course Schedule:

Week	Date	Topic	Assignments
1	05-Sep-24	Introduction to Psychology and Technology	
2	09-Sep-24 12-Sep-24	Cognitive Psychology and Technology	<i>Reflection Paper#1</i> In-class group discussion
3	16-Sep-24 19-Sep-24	Human and Artificial Intelligence	<i>Reflection Paper#2</i> In-class group discussion
4	23-Sep-24 26-Sep-24	Social Media and Mental Health	<i>Reflection Paper#3</i> In-Class Group Discussion
5	01-Oct-24 03-Oct-24	*Tuesday Class* Health Technology and Well-being	<i>Reflection Paper#4</i> In-Class Group Discussion
6	07-Oct-24 10-Oct-24	Technology and Learning	<i>Reflection Paper#5</i> <i>Guest Speaker</i>
7	14-Oct-24 17-Oct-24	Fall Reading Break	
8	21-Oct-24 24-Oct-24	Mid-Term No Class	
9	28-Oct-24 31-Oct-24	Expertise, Knowledge and Skill Development vs. AI	<i>Reflection Paper#6</i> In-Class Group Discussion
10	04-Nov-24 07-Nov-24	Privacy, Surveillance, and Psychological Impact	<i>Reflection Paper#7</i> In-Class Group Discussion
11	11-Nov-24 14-Nov-24	NeuroTechnology	<i>Reflection Paper#8</i> In-Class Group Discussion
12	18-Nov-24 21-Nov-24	Digital Identity and Self-Concept No Class	<i>Reflection Paper#9</i> In-Class Group Discussion
13	25-Nov-24 28-Nov-24	Future Trends: Uploading your Mind/ Digital Afterlife	<i>Reflection Paper#10</i> In-Class Group Discussion

Reading Assignments:

Week	Date	Reading1	Reading2	Resource
1	05-Sep-24			
2	09-Sep-24	Yang, S., Wilson, K. M., Roady, T., Kuo, J., & Lenné, M. G. (2022). Evaluating Driver Features for Cognitive Distraction Detection and Validation in Manual and Level 2 Automated Driving. <i>Human Factors</i> , 64(4), 746-759.	Joshi, S.C., Woodward, J. & Woltering, S. Cell phone use distracts young adults from academic work with limited benefit to self-regulatory behavior. <i>Curr Psychol</i> 42, 27071–27087 (2023). https://doi.org/10.1007/s12144-022-03830-4	Podcast: The Ezra Klein Show Ep: Tired? Distracted? Burned Out? Listen to This.
	12-Sep-24			
3	16-Sep-24	Hicks, M.T., Humphries, J. & Slater, J. ChatGPT is bullshit. <i>Ethics Inf Technol</i> 26, 38 (2024). https://doi.org/10.1007/s10676-024-09775-5	Lappin, S. Assessing the Strengths and Weaknesses of Large Language Models. <i>J of Log Lang and Inf</i> 33, 9–20 (2024). https://doi.org/10.1007/s10849-023-09409-x	Ted Talk: Mustafa Suleyman What is an AI anyway?
	19-Sep-24			
4	23-Sep-24	Lee, H. R., Lee, H. E., Choi, J., Kim, J. H., & Han, H. L. (2014). Social Media Use, Body Image, and Psychological Well-Being: A Cross-Cultural Comparison of Korea and the United States. <i>Journal of Health Communication</i> , 19(12), 1343–1358. https://doi.org/10.1080/10810730.2014.904022	Keles, B., McCrae, N., & Grealish, A. (2019). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. <i>International Journal of Adolescence and Youth</i> , 25(1), 79–93. https://doi.org/10.1080/02673843.2019.1590851	The Conversation: Is social media making you unhappy? The answer is not so simple
	26-Sep-24			
5	01-Oct-24	Yen, HY. Smart wearable devices as a psychological intervention for healthy lifestyle and quality of life: a randomized controlled trial. <i>Qual Life Res</i> 30, 791–802 (2021). https://doi.org/10.1007/s11136-020-02680-6	Steel, R. P. (2023). The longitudinal associations between wearable technology, physical activity and self-determined motivation. <i>International Journal of Sport and Exercise Psychology</i> , 22(4), 1030–1047. https://doi.org/10.1080/1612197X.2023.2180067	Podcast: Sliced Bread Ep: Fitness Trackers
	04-Oct-24			

6	07-Oct-24	Criollo-C S, Guerrero-Arias A, Jaramillo-Alcázar Á, Luján-Mora S. Mobile Learning Technologies for Education: Benefits and Pending Issues. Applied Sciences. 2021; 11(9):4111. https://doi.org/10.3390/app11094111	Koppitsch, S. E., & Meyer, J. (2021). Do Points Matter? The Effects Of Gamification Activities With and Without Points on Student Learning and Engagement. Marketing Education Review, 32(1), 45–53. https://doi.org/10.1080/10528008.2021.1887745	Ted Talk: Kristen Tamm VR and AI in Education
	10-Oct-24			
7	14-Oct-24	Reading Week		
	17-Oct-24			
8	21-Oct-24	Midterm		
	24-Oct-24			
9	28-Oct-24	Richardson, S. (2020). Cognitive automation: A new era of knowledge work? Business Information Review, 37(4), 182-189. https://doi.org/10.1177/0266382120974601	Rinta-Kahila, Tapani; Penttinen, Esko; Salovaara, Antti; Soliman, Wael; and Ruissalo, Joonas (2023) "The Vicious Circles of Skill Erosion: A Case Study of Cognitive Automation," Journal of the Association for Information Systems, 24(5), 1378-1412.	Podcast: 99% Invisible Ep: Children of Magenta (on Aviation and Automation) TW: discusses plane crash
	31-Oct-24			
10	04-Nov-24	Matz, S. C., Appel, R. E., & Kosinski, M. (2020). Privacy in the age of psychological targeting. <i>Current opinion in psychology</i> , 31, 116-121. https://doi.org/10.1016/j.copsyc.2019.08.010	Ramasundaram, A., Gurusamy, R., & George, A. (2024). Employees and workplace surveillance: Tensions and ways forward. Journal of Information Technology Teaching Cases, 14(1), 2-6. https://doi.org/10.1177/20438869221142027	Podcast: Smart People Ep: Brain Surveillance with Nita Farahany
	07-Nov-24			
11	11-Nov-24	González-Márquez, C. (2023). Neuromodulation and memory: exploring ethical ramifications in memory modification treatment via implantable neurotechnologies. <i>Frontiers in Psychology</i> , 14, 1282634.	Erden, Y. J., & Brey, P. (2023). Neurotechnology and ethics guidelines for human enhancement: The case of the hippocampal cognitive prosthesis. <i>Artificial organs</i> , 47(8), 1235-1241.	Podcast: The Future of Everything Ep: Chip in the Brain?
	14-Nov-24			

12	18-Nov-24	Granic, I., Morita, H., & Scholten, H. (2020). Beyond Screen Time: Identity Development in the Digital Age. <i>Psychological Inquiry</i> , 31(3), 195–223. https://doi.org/10.1080/1047840X.2020.1820214	Gabarnet, A., Feixas, G., & Montesano, A. (2023). What Is the Psychological Role of the Virtual Self in Online Worlds? A Scoping Review. <i>Multimodal Technologies and Interaction</i> , 7(12), 109.	Podcast: TED Radio Hour Ep: Going incognito
	21-Nov-24			
13	25-Nov-24	Öhman, C., Floridi, L. An ethical framework for the digital afterlife industry. <i>Nat Hum Behav</i> 2, 318–320 (2018). https://doi.org/10.1038/s41562-018-0335-2	Lindemann, N.F. The Ethics of 'Deathbots'. <i>Sci Eng Ethics</i> 28, 60 (2022). https://doi.org/10.1007/s11948-022-00417-x	Podcast: The Digital Human Ep: Reflections
	28-Nov-24			

Copyright of Course Materials

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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 all have responsibilities for upholding [the fundamental values of academic integrity](#); honesty, trust, fairness, respect, responsibility and courage. These values 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 (see the [Senate Report on Principles and Priorities](#)).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see [Academic Regulation 1](#)) on the [Arts and Science website](#), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Accommodation Statement

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at [Senate in November 2016](#). If you are a student with a disability and think you may need academic accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the [QSAS website](#).

Academic Considerations for 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 health issues (e.g., stomach flu, pneumonia, COVID diagnosis, vaccination, etc.)
- Responses to traumatic events (e.g., Death of a loved one, divorce, sexual assault, social injustice, etc.)
- Requirements by law or public health authorities (e.g., court date, isolation due to COVID exposure, 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. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the [portal where a request can be submitted at](#). Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

For guidance on **submitting requests**, please see refer to the Resource Guides available on the [Academic Consideration website](#) under "Applying for Academic Consideration."

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:

Accommodations Administrator: Tara Karasewich
Accommodations Email address: psyc.accom@queensu.ca

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their Professors/Course Coordinators as soon as possible once Consideration has been granted. Any delay in contact may limit the Consideration options available.

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 our website](#).

Turnitin Statement

***NOTE:** *You are free to object to the use of Turnitin, if you let the instructor know via email by September 15th. Alternate arrangements will be made to ensure the integrity of the work.*

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 assignments through 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 to detect plagiarism.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. Turnitin compares submitted files against its extensive database of content, and produces a similarity report and a similarity score for each assignment. A similarity score is the percentage of a document that is similar to content held within the database. 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.

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