Cognitive Psychology

PSYC 221 — Winter 2023

Wednesday 1:00 pm – 2:30 pm Friday 11:30 am – 1:00 pm Dunning Hall Auditorium

Instructor:

Dr. Monica Castelhano <u>monica.castelhano@queensu.ca</u>

Drop-In Hours: Wednesday 11:00am -12:00pm (Craine Hall 409)

Teaching Team:

Neha Parvez <u>n.parvez@queensu.ca</u>

Drop-In Hours: Mondays 2pm-3pm (Humphrey 202)

Isaac Lindenberger i.lindenberger@queensu.ca

Drop-In Hours: Fridays 1pm-2pm (Humphrey 202)

Hannah Lum Smith h.lumsmith@gueensu.ca

Drop-In Hours: Mondays 11:30pm-12:30pm (Humphrey 202)

Keanna Bamdad Rowchan vdt2@queensu.ca

Drop-In Hours: Mondays 10am-11am (Humphrey 202)

Course Description

This course is a survey of the topics in cognitive psychology. We will examine the basic processes involved in perception, attention, memory, representations, thinking, language and other topics. Cognition is far more complex than it appears. The simple act of answering a cell phone involves dozens of processes that you probably don't think about. Also, we'll learn about quirky things your brain does and have fun doing it!

Be prepared to read quite a bit and think in new ways about how we think, act and do everyday things. All material (in the textbook and the lectures) is fair game for testing. Attendance is expected for all lectures, but not mandatory (Slides will be available on onQ a couple of hours before each class). Bonus points are awarded for participation and active engagement in the class (see below for more details). You are responsible for all materials presented in class.

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Course Materials

Cognitive Psychology: Connecting Mind, Research and Everyday Experience

5th Edition*

E. Bruce Goldstein

University of Pittsburgh and University of Arizona ISBN-10: 1337408271 | ISBN-13: 9781337408271

Please Note: Online textbook resources are NOT REQUIRED (No CogLab Assignments and No Mindtap are needed for this course!)





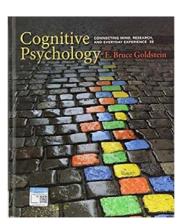
Let us acknowledge that Queen's University is situated on traditional Anishinaabe and Haudenosaunee territory. We are grateful to be able to live, learn, work, and play on these lands. I am grateful to live as an uninvited guest upon the traditional territories of the Haudenosaunee Confederacy and the Anishinabek Nation. To acknowledge this traditional territory is to recognize its longer history, one predating the establishment of the earliest European colonies. It is also to acknowledge this territory's significance for the Indigenous Peoples who lived, and continue to live, upon it and whose practices and spiritualities were tied to the land and continue to develop in relationship to the territory and its other inhabitants today.

Equity, Diversity and Inclusivity Statement

Queen's University recognizes that the values of equity and diversity are vital to and in harmony with its educational mission and standards of excellence. It acknowledges that direct, indirect, and systemic discrimination exists within our institutional structures, policies, and practices and in our community. These take many forms and work 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.

Course Learning Outcomes

- Describe cognitive processes with respect to the brain, sensory, and perceptual mechanisms
- Evaluate the distinction of top-down and bottom-up processes to cognitive phenomena
- Describe the contribution of memory to cognition
- Describe higher order cognition processes and how lower level processes interact with higher order processes
- Connect cognitive processes to everyday activities and real-life applications
- Critically evaluate cognitive phenomenon as they are described in the media



^{*}Earlier editions are missing too much material.

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Workload

Exams

There will be a total of 3 exams in this class (2 Midterms, not cumulative and a Final, cumulative). Each exam will cover the material listed in the course schedule (below) and will take place during the class period listed. The final covers the entire course.

<u>There will be NO make-up midterm exams.</u> If you miss an exam, you will need to submit an appropriate form (see below) and then you will be permitted to re-weight your exams. Please visit the Student Wellness website at: http://www.queensu.ca/studentwellness/accessibility-services/ to submit the appropriate academic consideration for your situation. See Class Schedule below for in-class exam dates.

Podcast Reaction Papers

Throughout the semester, there will be 3 low-stakes writing assignments (3% each). This is really so that your first written assignment is some high-stakes research paper in your upper years. It will give you a chance to practice and it is a way of learning about something new in (hopefully) a different way).

For this assignment, you will submit (via onQ) a brief paper anywhere between 250 to 500 words. The podcasts will discuss real-life situations that are connected to the topic for that week. The reaction paper is meant to show me that you have read appropriate chapter, listened to the podcast and that you have thought about them enough to synthesize new ideas! I am interested in *your* ideas. A summary or description of the podcast is not enough.

You are encouraged to write a new idea that goes beyond a summary, like:

- a *critique* of coverage what things did not fit with the textbook explanations of the concepts, what concepts were too simplified or glossed over or perhaps exaggerated;
- talk about the *implications* of something discussed in the podcast;
- suggest a new experiment to explore a specific question raised in the podcast.

ChatGPT: Although this new Chatbot does a good job of summarizing things, it is not so great at generating new ideas. If you just copy and paste what it spits out, you'll likely not do well. I've tried it and all of the outputs would receive at most a C, but most likely would get a failing grade. It basically sounds like a repetitive highschooler. However, you can use it to get things started (so you're not staring at a blank page). Also, be aware that this thing makes stuff up – do not trust any citations it spits out. Double check it all!

TLDR: Use ChaptGPT as a starting point but be sure to go beyond just the basic output it provides.

Grading of Podcast Papers is based on Young's I-C-E (Ideas, Concepts, and Extensions):

- **3/3** Comments and responses reveal a capacity to analyze, synthesize, and evaluate material and give evidence of *original thinking* and an extensive knowledge base. They demonstrate a careful, concise, critical analysis with a clear and well-argued hypothesis based on the material. They exhibit evidence of learning that is willing to explore beyond the initial learning situation.
- 2/3 Comments and responses reveal a good analysis and some critical reasoning. They demonstrate a reasonable understanding of relevant issues and familiarity with the material. They demonstrate a solid understanding of the relationship or connections among the basic concepts. They show a need to be more concise or precise in details and more carefulness in articulating arguments.

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• 1/3 Comments and responses show an acceptable treatment of the subject matter. They demonstrate an understanding of the basic facts, vocabulary, details, and elemental concepts and show an ability to deal with simple issues arising out of the material. The student needs to engage the subject matter more fully and formulate ideas more clearly.

Podcast Assignments are due at 5pm on Friday of the assigned week and are to be submitted via onQ.

Topic	Show	Episode	Duration	Due Date
Attention (Chpt 4)	The Happiness Lab	Dial D for Distracted	30min	27-Jan
Memory Errors (Chpt 8)	Radiolab	Adding Memory	19min	03-Mar
Creativity (Chpt 12)	Hidden Brain	Embrace the Chaos	24min	24-Mar

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.

Evaluation

Podcast Reaction Papers	9%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	41%
Bonus: Class & Experiment Participation	5%*

^{*}Bonus is conditional. See below for details.

Grade Bonus

There is a chance to get a 5% bonus on your FINAL Grade. Please note, the bonus credits cannot be used to change a failing mark to a passing mark. There are two sources for the bonus.

CLASS PARTICIPATION Bonus (3%): Here is how it works – during each class there will be mini-pop quizzes that will ask you to enter in a response to a series of questions. The number of quizzes will vary from class-to-class. The percent earned will be equivalent to how many quizzes you have completed over the entire semester and will be calculated at the end of the term. So, to earn the full bonus marks, you will need to participate in ALL such quizzes. If you can't, don't worry as you are awarded whatever portion of the bonus that you do participate in.

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This bonus is based on learning and memory research! It's called the Test-Retest effect: The best way to gain knowledge is through repeated quizzing and testing. That means, when you study — make some practice exam questions as you go (in a separate document or scrapbook). Then, as part of your material review, test yourself! Studies have shown that people who perform multiple tests (even with no grading or low stakes), do much better at LEARNING the information. Then lather, rinse and repeat! *Make up multiple sets of questions for each chapter and use it as part of your end of year review.*

Participation will require a device connected to the internet: phone, tablet or laptop. It will require that you sign-in to https://kahoot.it/ with your NetID as your nickname (in order for us to allot the correct bonus for each student). Please check onQ for more detailed instructions.

Please Note: This bonus is very much conditional on fair class participation. If there is cheating or the system works poorly (for whatever reason), I reserve the right to revoke the bonus completely from all students. So play fair and we'll see how this goes.

EXPERIMENT PARTICIPATION Bonus (2%): The Psychology Department Participant Pool now includes students enrolled in this course. For every half hour of research completed, you can increase your final mark in this course by 0.5% up to a maximum of 2%. **If you are enrolled in more than one eligible course, you will have to select the course towards which your research participation will be credited when you sign up for a study.** This way you can complete studies toward each course. However, you cannot apply the same study credit to more than one course. Also, the penalty for missed experiments is the same as the one in PSYC 100.

As with PSYC 100, studies will be listed on SONA, and you will receive an email with the information you need to register your account on SONA after the end of the drop/add period. Expect the email around the middle of the third week of the semester. In addition, during the first week of the semester, you will be emailed a link to an online pre-screening questionnaire that will be due by the end of the drop/add period (second Friday of the term). If you complete the larger pre-screening questionnaire online, you may become eligible for additional studies, and those researchers will contact you directly to find a time to participate.

Participation in research is entirely voluntary. If you want to earn credit but don't want to participate in a particular study, you can complete an alternative assignment instead. For the alternative assignment, researchers will offer either a walk-through of their experiment, or they will have you to read an article or blog post, listen to a short podcast, or watch a short video and then answer questions about it. Researchers of the particular study for which you wish to get credit will administer the alternative assignment (NOT course instructors -- course instructors are not involved in the crediting for studies or alternative assignments). You must contact the researcher of a particular study (see the study's contact information on SONA) before the last week of classes for the semester to complete the alternative assignment option. Although the length of studies will vary, the alternative assignment will take less time (approximately 30 minutes), so you will earn 0.5% for each alternative assignment that you complete.

Please check onQ for more detailed instructions. For further details, please follow this <u>link</u>.

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Class Schedule

Below is a schedule of the lectures and assignments that will be given. Reading the chapters before the lecture will aid you in understanding the lecture but *is not necessary.* I've designed the lectures so they can serve as an introduction to the chapter. Sometimes reading right after the lecture will serve to consolidate information more easily. Find a reading schedule that fits you and stick with it.

Please note, for all podcast assignments, you will need to have done the readings for that week to be able to answer intelligently and thoughtfully, so plan ahead on how you are going to complete the readings and the assignments for those weeks.

The exams and assignments due dates are listed below.

NOTE: The schedule of topics is subject to change.

WEEK	DATE	TOPIC	READING	COMMENTS
1	Jan 11, 13	Introduction	Chpts 1 & 2	
2	Jan 18, 20	Perception	Chpt 3	
3	Jan 25, 27	Attention	Chpt 4	Jan 27: Podcast Assignment #1
4	Feb 1, 3	Short-term and Working Memory	Chpt 5	
5	Feb 8	MIDTERM 1 Chapters 1-5 & Lectures		
	Feb 10	No Class		
6	Feb 15	Long-term Memory: Structure	Chpt 6	
	Feb 17	Long-term Memory: Encoding & Retrieval	Chpt 7	
7	Feb 22, 24	Reading Week		
8	Mar 1	Long-term Memory: Encoding & Retrieval	Chpt 7	
	Mar 3	Everyday Memory & Memory Errors	Chpt 8	Mar 3: Podcast Assignment #2
9	Mar 8, 10	Knowledge	Chpt 9	
10	Mar 15	MIDTERM 2 Chapters 6-9 & Lectures		
10	Mar 17	No Class		
11	Mar 22, 24	Problem Solving & Creativity	Chpt 12	Mar 24: Podcast Assignment #3
12	Mar 29, 31	Decision Making	Chpt 13	
13	Apr 5	Final Review Class		
	Apr 7	No Class		

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Grading Method

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:

Queen's Official Grade Conversion Scale

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

Questions about the Course and Contacting the Teaching Team

Throughout this course, you may come upon some general questions about the course and any assignments. If you think that your question may benefit other students, you are invited to post your question in the Course Questions discussion forum. Feel free to help answer your peers' questions on this forum. The teaching team will monitor this discussion forum and answer questions. Most questions are answered within 24 hours. Any other questions that you would prefer to share privately, please contact me or the TAs at one of the emails listed on page 1.

Policy Regarding Remarking

Students who believe grades on their assessments are inaccurate should first discuss the grading and feedback with the teaching assistant who graded their work. Requests for re-marking should be emailed to the instructor and must explicitly and clearly state how the work deserves a different grade than assigned. The request should include: the assignment, all feedback from your TA (including your discussion with them), and why discussions with the teaching assistant did not resolve the situations. If I decide to approve re-mark, another teaching assistant will re-mark the assessment under my supervision. The re-mark will stand as the final mark, even if it is lower that the original mark.

Course Announcements

Throughout the course, I will routinely post course news in the Announcements section of the course homepage. I encourage you to actively check the course onQ main page for course announcements throughout the semester for reminders and additional course information or learning opportunities.

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Academic Integrity

Queen's students, faculty, administrators and staff 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 (see www.academicintegrity.org) 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.

Students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at Integrity@Queen's University, 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. http://www.queensu.ca/academicintegrity/students.html

Accommodation Statement

Queen's University is committed to achieving full accessibility for persons 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.

Students seeking Academic Accommodations for a chronic or ongoing health/mental conditions, learning disability, or an existing disability should register with <u>Queen's Student Accessibility Services</u> (<u>QSAS</u>). For further information, please contact the QSAS Intake Coordinator at: <u>qsas.intake@queensu.ca</u>.

Academic Considerations 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 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 <u>Senate Policy on Academic Consideration for Students in Extenuating Circumstances</u>.

The Faculty of Arts and Science has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances, which can be found here: https://www.queensu.ca/artsci/undergraduate/student-services/academic-consideration. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

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

N.B: The COVID-19 pandemic is an evolving situation. If you have symptoms or are deemed a close contact of someone with COVID, please access our **COVID-Related Absence Reference Guide** on the Academic Consideration website. This guide will provide you with information on applying for consideration, the types of documentation (including non-medical documentation) you can use to support your request, as well as insight into how the Faculty office will assess these requests.

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 Karesewich
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 their Professors/Course Coordinators as soon as possible once Consideration has been granted. Any delay in contact may limit the Consideration options available.

Please follow up with me using email within 2 days of receiving verification of your Consideration request. 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 <u>Academic Consideration</u> website.

Location and Timing of Final Examinations

As noted in Academic Regulation 8.2.1, "the final examination in any class offered in a term or session (including Summer Term) must be written on the campus on which it was taken, at the end of the appropriate term or session at the time scheduled by the Examinations Office." The exam period is listed in the key dates prior to the start of the academic year in the Faculty of Arts and Science Academic Calendar and on the Office of the University Registrar's webpage. A detailed exam schedule for the Fall Term is posted before the Thanksgiving holiday; for the Winter Term it is posted the Friday before Reading Week, and for the Summer Term the window of dates is noted on the Arts and Science Online syllabus prior to the start of the course. 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.

Copyright Statement

Please note: I do not permit the recording in any part of the lectures. This material is copyrighted and is for the sole use of students registered in PSYC 221. This material shall not be distributed or disseminated to anyone other than students registered in PSYC 221. Failure to abide by these conditions is a breach of copyright, and may constitute a breach of academic integrity under the University Senate's Academic Integrity Policy Statement.