Visual Cognition in the Real World
PSYC423   Winter 2023
Syllabus

Tuesdays 1:00pm-2:30pm
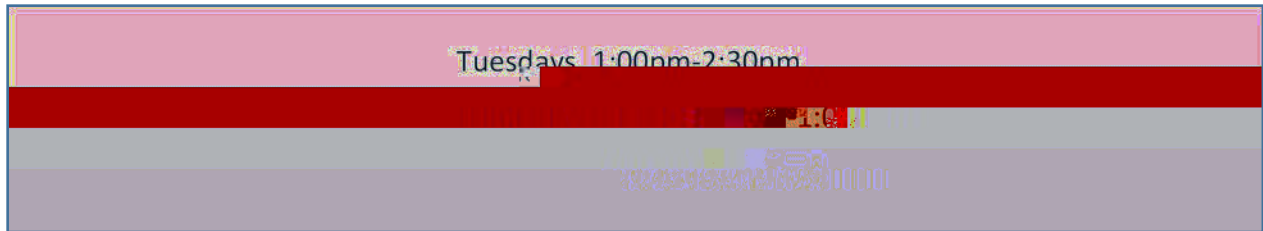
General Course Information

PSYC 423 – Visual Cognition in the Real World
Winter 2023 (January 9, 2021 – April 6, 2021)
3 credits
Pre requisites: PSYC 221/3.0 or PSYC 220/6.0 or COGS 200/6.0

Course Description

Visual cognition has been studied extensively in the lab, but it's not always clear how theoretical questions apply to the real world. In this course, we will examine both theoretical questions on perception, attention and memory as well as see how these apply to real world situations - examining x-rays, distracted driving and gaming.

Instructor Information

Name: Dr. Monica Castelhano
Office address: Craine Bldg, rm 409
Drop In hours: Tuesdays 11:00am 12:00pm (subject to change; please see onQ for updates)
Email: monica.castelhano@queensu.ca

Important University Dates

Key dates (first day of class, tuition due date, last day to add/drop courses) are important to your academic success. Please find them at Important Dates.

Equity, Diversity and Inclusivity Statement

Queen's is committed to counteracting discrimination in this institution and developing a climate of educational equity that recognizes and respects the equal dignity and worth of all who seek to participate in the life, work and mission of the University. Such a climate is created and maintained by developing a university wide commitment to and understanding of educational equity, supported by policies, programs, curricula, practices and traditions that facilitate individuals   and equity seeking groups free, safe, and full participation. See Queen's Educational Equity Policy for further information.

Course Learning Objectives

By the end of this course students will be able to:

x   Summarize current theories visual cognition with a special emphasis on scene processing, object recognition, visual attention, eye movements, visual memory and related applied fields

x   Critically evaluate current, experimental literature in the field of visual cognition

x   Develop writings skills

x   Summarize and communicate research findings in one area of visual cognition

x   Generate new research question in the field of visual cognition

Course Format

Each week will focus on a particular topic. Think of the class as having two meetings per week, one is in person and one takes place over two days and participation is asynchronous and online.

Here is the structure for each week:

x   À   Œ Ç   ýbu will have two readings focused on the topic for that week.

x   Every Monday by 7pm, a reaction paper is due (see below for a description).

x   Every Tuesday we will have an in person class discussion, in which we discuss the readings and the topic for that week (see below on how these will proceed).

x   Every Thursday by 5pm, one person from each group will be assigned as the presenter and will post a video of describing a new study on the topic for that week.

x   Every Friday by 5pm, other members of a group will post a reaction video answering a question posed by the presenter.

Generally, you will be introduced to a new topic through the weekly readings and a Reaction paper. You will have the opportunity to share thoughts of your reaction paper during the class discussion. Then, each week you will participate as either as the presenter for your group or as a viewer for the presenter. As the presenter, you will lead discussion on an article of your choosing related to that week's topic through the Flipgrid Assignment.

Course Materials

There is no textbook. Articles will be assigned to be read for each class. You will be able to download the articles from the web/library – use your research skills! Any articles not available through the school library system or available on line (through Google Scholar, the author's own website or other repositories such as Research Gate, bioRxiv or PsyArXiv) will be provided via onQ in advance. Please email me if you are having trouble finding a specific article.

Workload

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Participation is always good in a seminar class! You will be graded for your participation in the course, both for the in person discussions and for the online video assignments. All criticisms,

connections among the basic concepts. They show a need to be more concise or precise in details and more careful in articulating arguments.

- x íƚïComments 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.

Paper Presentation/Discussion

As a presenter, you will lead the discussion for your group. These will be conducted online via Flipgrid. For each presentation, you will choose a new article related to that week's topic and provide a ~5 minute summary presentation via Flipgrid . Flipgrid offers a platform to present a topic video and then response videos. The class will be divided into groups, and you will comment on each other's presentations. To help with the summary, each presenter is to provide a one page handout with key figures and list 2 3 questions that your group members can think about and include in their response. These handouts and a copy of your chosen article are to be uploaded on onQ (under Assignments for the Presentation number). The uploads and the presenter's video must be posted by Thursday at 5pm and each group members' response must be posted by Friday at 5pm .

How it will work: Each week I will send an invitation link to all presenting members of each group. At 5pm on Thursday, the link will be posted to the class. These videos will be a max 5 min long.

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5. Pay close attention to what your peers say before you respond. Think through and review your responses 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.

If You're Sick or Having a Rough Week
Reaction Paper assignments, participation in class discussions and presentations have been designed with flexibility for academic consideration for all students. This 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. Please send me an email (monica.castelhano@ queensu.ca) asap and we will work something out that works for you and your group.

Research Proposal
There is no exam in this course.   Instead, you will be writing a brief research proposal.
On Wednesday April 12th at 11:59pm, you will be required to submit a research paper (10 pages max) on a topic of current interest within the field of scene perception/scene processing. The final paper will include a review of past research relevant to your topic, and a proposal for future research (i.e., a new experiment). Late papers will be penalized 10% per day and receive a grade of 0 after 5 days. More information will follow (submit under Assignments on onQ).

To help you get a head start on this assignment, you will choose your topic and hand in a one paragraph summary (1/2 page long max) describing y

Accommodation Statement

Queen's University is committed to achieving full accessibility

3   Tuesday   24 Jan   Memory for Scenes

5	Tuesday	07 Feb	On Line Scene Representations How much do you really see as you look around?	Rensink, R. A., O'Regan, J. K., & Clark, J. J. (1997). To see or not to see: The need for attention to perceive changes in scenes. Psychological science, 8(5), 368 373. Nobuyuki Kawai & Huachen Qiu (2020) Humans detect snakes more accurately and quickly than other animals under natural visual scenes: a flicker paradigm study, Cognition and Emotion, 34:3, 614 620. Reaction Paper 4 Due
	Online	09 Feb	Flipgrid Assignment (Gro up Member 4): Presentations due Thursday at 5pm; Responses due Friday at 5pm	
6	Tuesday	14 Feb	At the Movies: How well do people remember details at the scene of a movie? Does it impact how the story is interpreted?	Smith T J, Lamont P, Henderson J M. (2013). Change blindness in a dynamic scene due to endogenous override of exogenous attentional cues. Perception 42(8) 884 886. Levin, D. T., Baker, L. J., Wright, A. M., Little, J. W., & Jaeger, C. B. (2022). Perceiving versus scrutinizing: Viewers do not default to awareness of small spatiotemporal inconsistencies in movie edits. Psychology of Aesthetics, Creativity, and the Arts. Reaction Paper 5 Due
	Online	16 Feb	Flipgrid Assignment (Gro up Member 5): Presentations due Thursday at 5pm; Responses due Friday at 5pm	
7	Tuesday	21 Feb	***Reading Week***	
	Online	23 Feb		

11   Tuesday   21 Mar   Searching Through
Scenes
How do you quickly

| 13 | Tuesday | 04 Apr | Driving
What do you pay attention to when you drive? What happens in more complex environments? What about distractions? | Grahn, H., & Kujala, T. (2020). Impacts of Touch Screen Size, User Interface Design, and Subtask Boundaries on In Car Task's Visual Demand and Driver Distraction. International Journal of Human Computer Studies, 142, 102467.

Wood, G and Hartley, G and Furley, P and Wilson, MR (2016) Working Memory Capacity, Visual Attention and Hazard Perception in Driving. Journal of Applied Research in Memory and Cognition, 5(4), 454 462.

Reaction Paper   10 Due |
| | Online | 06 Apr | Flipgrid Assignment (Gro up Member 5):
Presentations due Thursday at 5pm;
Responses due Friday at 5pm

Final Paper Due (Wednesday, April 12) | |