# PSYC\*4580, Course Outline: Winter 2023

# **General Information**

DUE to the ongoing COVID-19 pandemic some courses are being offered virtually and some face to face. This course is offered using the Face-to-Face format. The course has set day, time, and location of class.

YOU ARE STRONGLY ENCOURAGED TO ATTEND ALL CLASSES, AND PART OF YOUR FINAL GRADE IS BASED ON PARTICIPATION. To accommodate those occasions where you are unable to attend class for reasons out of your control, every lecture (but not student presentations) will be live-streamed and lecture recordings will be posted to CourseLink.

**Course Title:** Special Topics in Behavioural Sciences: Visual Cognition

### **Course Description:**

Throughout the day we are bombarded by far more visual information than our minds and brains can process in detail. Yet, we can use this visual information to successfully guide complex behaviours like driving a car. This course reviews classical and recent basic research advances in the field of visual cognition that help us better understand our remarkable ability to make sense of the visual environments we live in.

Credit Weight: 0.5

Academic Department (or campus): Psychology

**Semester Offering: Winter 2023** 

Class Schedule and Location: MCKN, Room 117, Tuesday and Thursday 11:30am - 12:50pm

## **Instructor Information**

Instructor Name: Naseem Al-Aidroos

Instructor Email: Please see Course Policy on Contacting the Instructor or TA. This email is for

emergency contact only: naseem@uoguelph.ca

Office location and office hours: MacKinnon Extension 4018, drop in office hours Mondays

2:30-3:30pm.

# **GTA Information**

GTA Name: Brook Pardy

GTA Email: pardyb@uoguelph.ca

GTA office location and office hours: Announced on CourseLink News Feed after each grade is

released

## **Course Content**

### **Specific Learning Outcomes:**

By the end of this course, students should be able to:

- 1. Recall classical and recent discoveries in the field visual cognition and explain how these discoveries inform our current understanding of how the mind and brain make sense of visual environments.
- Explain the questions that researchers posed to make these discoveries, and how the
  questions were eventually answered using cognitive and/or cognitive neuroscience
  paradigms.
- 3. Predict, based on past research, the results of hypothetical experiments.
- 4. Comprehend research articles reporting visual cognition discoveries, and assess the quality of the contribution made by a given article.
- 5. Understand and evaluate the methodologies employed by visual cognitive neuroscientists.
- 6. Describe how the data reported by visual cognitive neuroscientists relates to the conclusions they made about vision and the mind and brain.
- 7. Provide accurate oral descriptions summarizing visual cognitive research.
- 8. Independently read and understand visual cognition literature.
- 9. Differentiate between researchers (and university instructors) claims that are well founded on scientific research from those that are not (even if they sound plausible).
- 10. Appreciate how debates in visual cognition emerge, and are resolved through the practice of sound science.

#### **Lecture Content:**

Lecture #	Date	Topics (may change) and in-class quiz dates	
1	Jan 10	Introduction to visual cognition	
2	Jan 12	Attention basics	
3	Jan 17	Object attention	
4	Jan 19	Visual search	
5	Jan 24	Visual memory	
	Jan 26	Quiz 1	
6	Jan 31	Attentional capture	
7	Feb 2	Symbolic cues	
8	Feb 7	Control of attentional capture	
9	Feb 9	Memory of attentional goal	
	Feb 14	Quiz 2	
10	Feb 16	Memory of searched distractors	
	Feb 21,23	Winter Break	
11	Feb 28	Reassessing VWM capacity	
12	Mar 2	Individual differences in VWM capacity	
13	Mar 7	Perception for action	
	Mar 9	Quiz 3	
14	Mar 14	Action affects perception	

15	Mar 16	SNARC
16	Mar 21	Visual statistical learning
17	Mar 23	Ensemble statistics
	Mar 28	Pupillometry and eye movement trajectories
	Mar 30	Quiz 4
18	Apr 4	Emotion and attention
19	Apr 6	No class today

#### **Course Assignments and Tests:**

Assignment or Test	Due Date	<b>Contribution to Final</b>	Learning Outcomes
		Mark (%)	Assessed
Oral Presentation	Dates vary	20%	1,2,4-9
Burning Questions	Dates vary	8%	1-6, 8-10
Quiz 1	Jan 26	18%	1-6, 8-10
Quiz 2	Feb 14	18%	1-6, 8-10
Quiz 3	Mar 9	18%	1-6, 8-10
Quiz 4	Mar 30	18%	1-6, 8-10

# Additional Notes (if required):

**In-class quizzes:** The objective of the quizzes is to allow you to demonstrate that you have gained the relevant knowledge about the function of our visual minds and brains, and that you can synthesize this knowledge to make predictions about unanswered questions in visual cognition. The quizzes will contain both multiple-choice and written-answer questions. Quiz questions will cover lecture material and assigned readings. Quizzes are not cumulative. Please see note about missed quizzes below.

**Oral presentation**: In groups of 2, share a recent article (published in the last 5 years) with the class through an 8-minute oral presentation. Presentation instructions are available on CourseLink. Please see note below about missed presentations.

**Burning Questions (aka participation):** For every class with student presentations, you are required to submit a "burning question" based on any one presentation from that day. Questions must be submitted before the end of class using the Quiz tool on CourseLink. Each submitted question will contribute 1% of your final grade up to a maximum of 8%. There are 11 classes with student presentations, so you can miss 3 and still get the maximum 8% on the Burning Questions component of your final grade.

Final examination date and time: N/A

Final exam weighting: 0%

## **Course Resources**

#### **Other Resources:**

### **Assigned Readings:**

There is no course textbook. All assigned readings are primary research articles, and are available through CourseLink. The assigned readings are designed to help you develop:

- Your ability to process journal articles, which are the most reliable source for staying up to date with research
- Your ability to think independently. Many of the assigned readings will not be discussed
  in class, but will be tested through the in-class quizzes. Your challenge is to figure out
  how to make sense of these articles.

#### CourseLink:

- Copies of the lecture slides will be posted to CourseLink by 7am on the morning of each lecture, at the latest.
- Grades for all in class quizzes will be shared through CourseLink. As soon as grades are posted, I will add an announcement to the CourseLink News Feed.
- It is your responsibility to periodically verify your grades on CourseLink

# **Course Policies**

#### Contacting the Instructor or TA

To help your instructor and TA stay on top of answering your questions, please use the following procedures when contacting us:

- The easiest way to communicate with me is by chatting with me after class.
- The fastest way to get a response to simple questions is through the class discussion board on CourseLink. By simple, I mean questions that only require a sentence or two to answer. I check the board every weekday, and you are encouraged to respond to each other's posts.
- Longer questions, and questions of a confidential nature, should be brought to my office hours (times listed above). I'm always happy to have visitors, so take as much advantage of these office hours as you can!
- Please direct questions about quiz grading to the TA during their office hours (announced on CourseLink).
- My email is to be used for emergencies only.

## **Grading Policies**

Missed Quizzes: There are no make-up quizzes. You can miss one quiz without explanation, and your quiz grade will automatically be reassigned to the other quizzes (i.e., if you miss Quiz #2, each of the 3 other quizzes will be worth 25.3% instead of 19%). You do NOT need to provide documentation, nor inform the instructor. If you miss more than one quiz, you must email the

instructor immediately to discuss your options, or you will be given a grade of 0 and it will count toward your final grade. Having a conflict with your work schedule is NOT an acceptable reason for missing a quiz. If you write a quiz, the grade for that quiz will be counted (i.e., you cannot drop a quiz after writing it).

Missed Presentations: If you are unable to present your talk on the selected date for reasons out of your control, please contact the instructor AND your presentation partner by email immediately to reschedule your presentation.

#### **Course Policy on Group Work:**

Partners are expected to contribute equally to group presentations. If a member of a group has concerns, they must bring the concerns to the instructor during their office hours as early in the term as possible, and before the oral presentation is delivered.

## **Course Policy regarding use of electronic devices and recording of lectures:**

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

# **University Policies**

#### Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

#### **Academic Consideration**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

Academic Consideration, Appeals and Petitions

#### **Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: Academic Misconduct Policy

#### Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

#### Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact <u>Student Accessibility Services</u> as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the <a href="Student Accessibility Services Website">Student Accessibility Services Website</a>

#### **Student Feedback Questionnaire**

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March 30<sup>th</sup> – April 10<sup>th</sup>. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courselink, a reminder will pop-up when a task is available to complete.

Student Feedback Questionnaire

#### **Drop date**

The last date to drop one-semester courses, without academic penalty, is Monday April 10, 2023. For regulations and procedures for Dropping Courses, see the <u>Schedule of Dates in the Academic Calendar</u>.

Instructors must provide <u>meaningful</u> and <u>constructive feedback</u>, at <u>minimum 20% of the final</u> <u>course grade</u>, <u>prior to the 40th class day</u>. For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.

<u>Current Undergraduate Calendar</u>

# **Additional Course Information**

None.