

PSYC*3270, Course Outline: Fall 2022

General Information

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](#) and circulated by email.

Course format: Due to the ongoing COVID-19 pandemic some courses are being offered virtually, and some face to face. **This course is being offered Face to Face: The course has a set day, time, and location of class, and students are required to be on campus. The in-class quizzes are scheduled to take place face to face and cannot be completed remotely or virtually.** Lectures are officially face to face, though lectures will be streamed and recorded whenever possible. Two lectures (Oct 18th and Nov 22nd) will only be provided as recordings, with no live lecture.

Course Title: Cognitive Neuroscience

Course Description:

This course will focus heavily on reviewing and discussing primary research, with the goal of revealing the types of methods that cognitive neuroscientists use, and types of questions that they ask, as they try to understand the relationship between our minds and brains.

Credit Weight: 0.5 credits

Academic Department (or campus): Psychology

Semester Offering: Fall 2022

Class Schedule and Location: Tues and Thurs, 4:00-5:20 pm, in ROZH 103

Instructor Information

Instructor Name: Naseem Al-Aidroos

Instructor Email: **Please see Course Policy on Contacting the Instructor or TA.** Please use any of the contact options listed below instead of my email: naseem@uoguelph.ca. Email is not an effective tool for asking/answering questions.

Office location and office hours:

Mackinnon Extension 4018. Office hours are drop-in (no appointment necessary).

Mondays, 3:30-4:30pm. ****Office hours cancelled for Oct 3 and Oct 17.****

GTA Information

GTA Name: Samantha Joubran

GTA Email: sjoubran@uoguelph.ca

Role: Emails about missed quizzes and late assignments should be sent to Samantha Joubran

GTA Name: Rachel Eng

GTA Email: engr@uoguelph.ca

GTA Name: Shiobhon-Elora Weber

GTA Email: siobhone@uoguelph.ca

GTA Name: Katherine Churey

GTA Email: kchurey@uoguelph.ca

GTA office location and office hours: TBA on CourseLink after each test, and after paper grades are released.

Course Content

Specific Learning Outcomes:

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

1. Recall the major discoveries in the field of cognitive neuroscience and explain how these discoveries inform our current understanding of the mind and brain.
2. Explain the questions that researchers posed to make these discoveries, and how the questions were eventually answered using cognitive neuroscience paradigms.
3. Predict, based on past research, the results of hypothetical experiments.
4. Find research articles reporting cognitive neuroscience discoveries, and assess the quality of the contribution made by a given article.
5. Understand and evaluate the methodologies employed by cognitive neuroscientists.
6. Describe how the data reported by cognitive neuroscientists relates to the conclusions they made about the mind and brain.
7. Provide accurate written descriptions summarizing cognitive neuroscience research.
8. Independently read and understand cognitive neuroscience 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 the ethical decisions involved in cognitive neuroscience research, and why different people come to different conclusions.

Lecture Content:

Lect. #	Date	Topics (may change)	Assessments
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1	Sept 8	Introduction	
2	Sept 13	Overview of the brain	
3	Sept 15	Methods: Imaging (fMRI)	Course Outline Quiz
4	Sept 20	Catch-up or head-start lect. after quiz	Quiz 1
5	Sept 22	Methods: Electrophysiology (EEG/ERP)	
6	Sept 27	Methods: Stimulation (TMS)	
7	Sept 29	Perception: Low-level vision	
	Oct 4	Catch-up or head-start lect. after quiz	Quiz 2
8	Oct 6	Perception: High-level vision	
	Oct 11	Fall Study Break	
9	Oct 13	Attention: Spatial	Assignment 1 Due
10	Oct 18	Attention: Feature/object [Recorded only]	
11	Oct 20	Catch-up or head-start lect. after quiz	Quiz 3
12	Oct 25	Attention: Bottom-up	
13	Oct 27	Working Memory	
	Nov 1	Executive Function	
	Nov 3	Catch-up or head-start lect. after quiz	Quiz 4
14	Nov 8	Analysis: Connectivity	Assignment 2 Due
15	Nov 10	Long-term Memory	
16	Nov 15	Analysis: Classification	
17	Nov 17	Catch-up or head-start lect. after quiz	Quiz 5
18	Nov 22	Emotion [Recorded only]	
	Nov 24	Consciousness	Final Paper Due
	Nov 29	Interactions Across Cognition	
	Dec 1		Quiz 6

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Course outline quiz	Sept 8-15	2%	
Quizzes 1-6	Every 2 weeks (see above for dates).	48% (8% each)	1, 2, 5, 6, 8, 10
Article Review Assignment #1	Oct 13, 11:59pm	10%	1, 5, 6-10
Article Review Assignment #2	Nov 8, 11:59pm	10%	1, 5, 6-10
Research Paper	Nov 24, 11:59pm	30%	2-10

Additional Notes (if required):

Lectures: Lectures are officially face to face. I will try to live-stream lectures using Zoom, and post lecture recordings to CourseLink. **If students miss a lecture and the live stream or recording is not available, students are expected to take their own steps, such as arranging with other students to catch up on missed materials.** This type of remote delivery is still a new technology, and students should expect disruptions. A discussion board is available on CourseLink for students to share lecture notes, and specific questions about missed material can be brought to the instructor's office hours. To attend live lectures remotely, you must [create a Zoom account using your UofG email address](#). Links to live lectures and recordings, when available, are in the Content->Zoom Lectures section of CourseLink. If the instructor is unable to give a lecture (e.g., due to illness or other absence from campus), a lecture recording will be upload to CourseLink when possible. Because lectures are recorded, if you approach the front of the classroom once recording has started (i.e., from 10 minutes before the class starts until the end of class), you will be included in the video recording that is distributed to the whole class.

Course Outline Quiz: The first step in any course is to learn the courses' policies listed in the course outline. To recognize the time and effort this requires, 2% of your final grade is based on a Course Outline Quiz. The quiz is designed to reinforce your knowledge of the policies described in this outline. You can access the quiz though the Quizzes section on CourseLink. It can be completed anytime between Sept 8th and Sep 15th 11:59pm. You can take this quiz as many times as you want; your highest score is the one that counts.

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 minds and brains, and that you can synthesize this knowledge to answer both factual and conceptual questions about cognitive neuroscience. The quizzes will contain about 15 multiple-choice questions. The quizzes are written in class using bubble sheets (please bring a pencil) and cannot be completed remotely. Quiz questions will cover all new lecture material and assigned readings since the previous quiz. Note that topics throughout the course build iteratively off earlier content, and so you will need to be familiar with those topics even though quizzes are non-cumulative. See policy below about missed quizzes.

Article Review Assignments #1 and #2: A major focus of this course is to develop an understanding and appreciation of how cognitive neuroscientists ask and answer research questions. To this end, you will provide structured summaries and assessments of two articles. The due dates are listed in the schedule above. The details on these assignments can be found on CourseLink, along with the two assigned articles. Assignments are submitted to the associated Dropboxes on CourseLink.

Plagiarism is a serious academic offense and will not be tolerated. The writing in your assignment must be your own, and direct quotes are not allowed. When you submit your article reviews through CourseLink, your document will automatically be processed by **Turnitin software**. This software will produce an “Originality Report” for your work. This report is a useful tool for you in assessing potential instances of plagiarism, and you should make use of it. Two important notes:

- 1) A Turnitin Student Guide is available in the Content Section on CourseLink that describes how to make the best use of this software
- 2) You can resubmit your assignment as many times as you want (only the most recent version is kept). Please note, however, that it can take up to 24 hours to generate an Originality Report for resubmissions, so plan accordingly.

Final Paper: The final paper will consist of (a) a review of one current (2017 to present) research article in cognitive neuroscience (broadly defined, but not from the lectures or course readings) AND (b) a proposal for an additional experiment. The review should include the basic research question, methodology, results, and conclusions from the reviewed paper. The proposal should consist of a clearly defined experimental question, the theoretical underpinnings of the question, the method for examining the research question, and predicted results. In addition to a cover page and a reference page, the text of the paper is strictly limited to 6 pages (double-spaced, not less than 12 pt font, not less than 1 inch margins). Additional guidance on the paper will be given at the end of class on November 9. The grading rubric is available on CourseLink.

The paper must be submitted to the **Final Paper Dropbox** available through CourseLink by the assigned date. To ensure that the instructor and TA(s) can read your document, the **only acceptable file formats are Microsoft Word (i.e., .doc or .docx) and PDF**. Please see note about late papers below.

Plagiarism is a serious academic offense and will not be tolerated. The writing in your assignment must be your own, and direct quotes are not allowed. When you submit your final paper through CourseLink, your document will automatically be processed by **Turnitin software**. This software will produce an “Originality Report” for your work. This report is a useful tool for you in assessing potential instances of plagiarism, and you should make use of it. Two important notes:

- 1) A Turnitin Student Guide is available in the Content Section on CourseLink that describes how to make the best use of this software
- 2) You can resubmit your assignment as many times as you want (only the most recent version is kept). Please note, however, that it can take up to 24 hours to generate an Originality Report for resubmissions, so plan accordingly.

Final examination date and time: N/A

Final exam weighting: 0%

Course Resources

Other Resources:

Assigned Readings and Videos:

There is no course textbook. All assigned readings are 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:

- I will aim to have copies of the lecture slides posted to CourseLink by 7am on the morning of each lecture, at the latest.
- When available, links for live-streamed lectures, and their associated recording, will be available in the Content Section->Zoom Lectures.
- Grades for all in class quizzes, assignments, and papers 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:

- All questions about missed tests or late papers or assignments should be directed to the lead TA: Samantha Joubran (sjoubran@uoguelph.ca). If you email the instructor, your email will be forwarded to her.
- 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 or assignment grading to the TA during their office hours (announced on CourseLink).
- My email is to be used for emergencies only.

Grading Policies

Missed Quizzes: You can miss two quizzes without explanation, and your quiz grade will automatically be reassigned to the other quizzes (i.e., if you miss 2 quizzes, each of the 4 quizzes you do write will be worth 12% instead of 8%). You do NOT need to provide documentation, nor inform the instructor. If you miss a quiz for reasons out of your control and want to request a make-up, you will need to contact the TA indicated in the “Contacting the Instructor or TA” policies above. Make-up quizzes must be scheduled within 48 hours of the missed quiz, and written within 1 week of the missed quiz. If you miss more than two quizzes, you must contact the TA immediately to learn what your options are, or you will be given a grade of 0 and it will count toward your final grade. If you write a quiz, the grade for that quiz will be counted (i.e., you cannot drop a quiz after writing it).

Late Review Assignment or late Final Paper: 20% of the grade will be subtracted from the assigned grade each day the assignment or paper was late, including weekend days. Assignments or papers submitted more than 5 days late will receive a grade of 0. Late assignments and papers should be submitted through the usual Dropbox on CourseLink.

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

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

University Policies

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).

Safety Protocols

For information on current safety protocols, follow these links: <https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/>

<https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

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](#)

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 [Student Accessibility Services](#) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the [Student Accessibility Services Website](#)

Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#) .

Drop date

The last date to drop one-semester courses, without academic penalty, is Dec. 02, 2022. For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#).

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

[Current Undergraduate Calendar](#)

Additional Course Information

Turnitin: Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. 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.

In this course, your instructor will be using Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of Social and Applied Human Sciences.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

Etiquette and expectations: Course websites may include both synchronous and asynchronous interactions and have the same protections, expectations, guidelines, and regulations used in face-to-face settings.

In order to behave respectfully toward your instructors, TAs and fellow students, it's important to become familiar with the etiquette that is expected of you during your remote learning courses. Please keep in mind that inappropriate online behaviour will not be tolerated.

Examples of inappropriate online behaviour are as follows:

- Posting inflammatory messages about your instructor or fellow students

- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your user name and password
- Recording lectures without the permission of your instructor