PSYC*3270, Course Outline: Fall 2021

General Information

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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 three in-class tests (75% of final grade) are scheduled to take place face to face and cannot be completed remotely or virtually**. Lectures are officially face to face, though lectures may be available remotely sometimes (see additional notes below). [Disability-related requests for accommodation should follow standard university procedures](#), and all other requests should follow [standard academic consideration policy and procedures](#).

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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 2021

Class Schedule and Location: Tues and Thurs, 11:30-12:50pm, in ALEX 200

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. Office hours are drop-in (no appointment necessary), and
     virtual via Zoom (https://zoom.us/my/alaidroos). Tues 10:30-11am, and Thurs 1:30-
     2pm. Office hours for Nov 4th are cancelled.

GTA Information

GTA Name: Lindsay Plater
GTA Email: lplater@uoguelph.ca

GTA Name: Samantha Joubran
GTA Email: sjoubran@uoguelph.ca

GTA Name: Monique Carvalho
GTA Email: mcarvalh@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:

Lecture #	Date	Topics (may change) and in-class quiz dates
1	Sept 9	Introduction
2	Sept 14	Overview of the brain
3	Sept 16	Methods: Imaging (focus on fMRI)
4	Sept 21	Methods: Electrophysiology (focus on EEG/ERP)
5	Sept 23	Methods: Stimulation (focus on TMS)
6	Sept 28	Perception: Low-level vision

7	Sept 30	Perception: High-level vision
	Oct 5	**Test 1**
8	Oct 7	Attention: Spatial
	Oct 12	**Fall Study Break**
9	Oct 14	Attention: Feature/object
10	Oct 19	Attention: Bottom-up
11	Oct 21	Working Memory
12	Oct 26	Executive Function
13	Oct 28	Analysis: Connectivity
	Nov 2	**Test 2**
	Nov 4	**No class today**
14	Nov 9	Long-term Memory
15	Nov 11	Analysis: Classification
16	Nov 16	Emotion
17	Nov 18	Consciousness
18	Nov 23	Interactions Across Cognition
	Nov 25	**Test 3**
	Nov 30	**No class today—extra time to finalize paper**
	Dec 2	**Final Paper due**

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Course outline quiz	Sept 9-Oct 4	2%	
Test 1	Oct 5	25%	1-3, 5-10
Test 2	Nov 2	25%	1-3, 5-10
Test 3	Nov 25	25%	1-3, 5-10
Final Paper	Fri Dec 3, 11:59pm	23%	1,2,4-9

Additional Notes (if required):

Lectures: Lectures are officially face to face. To help accommodate current circumstances, 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), 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 and 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 9 and Oct 4 11:59pm. You can take this quiz as many times as you want; your highest score is the one that counts.

In-class test: The objective of the tests 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 make predictions about unanswered questions in cognitive neuroscience. The tests will contain both multiple-choice and written-answer questions. Test questions will cover lecture material and assigned readings and videos. Tests are not cumulative. Please see note about missed tests below.

Final Paper: The final paper will consist of (a) a review of one current (2016 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 **11:59pm on the last day of class (see above for specific 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 primary research articles, and are available through CourseLink along with any assigned videos. 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 tests. 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.
- 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 tests 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 should be directed Lindsay Plater (lplater@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 grading to the TA during their office hours (announced on CourseLink).
- My email is to be used for emergencies only.

Grading Policies

Missed Tests: You can miss one test without explanation, and your in-class test grade will automatically be reassigned to the other two tests (i.e., the two tests you do write will each be worth 37.5%). You do NOT need to provide documentation, nor inform the instructor. If you miss a test for reasons out of your control and want to request a make-up, you will need to contact the TA (lplater@uoguelph.ca). Make-up tests should be scheduled within 5 business days of the missed test. If you miss more than one test, you must contact the TA immediately (lplater@uoguelph.ca) to learn what your options are, or you will be given a grade of 0 and it will count toward your final grade.

Late Final Paper: Papers are graded out of 100 marks, and 10 marks will be subtracted from the assigned grade each day the paper was late, including weekend days. Papers submitted more than 5 days late will receive a grade of 0. Late papers should be submitted through the Final Paper 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:

[Return to Campuses - Preparing for Your Safe Return](#)

[Return to Campuses - Classroom Spaces](#)

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. 03, 2021. 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