

<p style="text-align: center;">CGSC 3908B: Honours Seminar in Cognitive Science Course Outline Winter 2023</p>

Class Information

Time: Fridays 8:35am-11:25am; Labs: Thursdays 8:35am-11:25am

Location: Lectures and Labs both in Dunton Tower 2203

Course Website: Brightspace

Course prerequisites: Third year standing, CGSC2001 and CGSC2002, and enrolment in B.Cog.Sc. Honours with a CGPA in the major requirements of 8.0.

Instructor Information

Instructor: Dr. Rebecca Merkley

E-mail: rebeccamerkley@cunet.carleton.ca

Office Hours: by appointment

Teaching Assistant(s)

TBA

Course Description

The main goal of this course is to prepare you to conduct research for your honours thesis. The specific skills you will acquire or practice include:

1. Identifying relevant literature through the use of PsychINFO/PsychArticles, Web of Science, and other resources.
2. Critical analysis of research papers.
3. Designing research, with an emphasis on operationalizing hypotheses and creating stimuli and manipulations to test those hypotheses.
4. Implementation of research studies including ethics applications, collecting and analyzing data.
5. Introduction to statistical software.
6. Writing APA-style research papers.
7. The development of expertise in cognitive science.

Readings

The required readings will be selected journal articles and book chapters. These will all be available through Brightspace and/or the library website. The readings are organized by week. You may also wish to consult books about research writing.

Recommended

- American Psychological Association. (2020). Publication manual of the American psychological association (7th ed.). <https://doi.org/10.1037/0000165-000> Available here: <https://apastyle.apa.org/products/publication-manual-7th-edition>. You can also access the highlights of APA format at: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html
- Strunk, W. Jr. & White, E. B. (2000). The elements of style (4th ed.). Allyn & Bacon. This handy little book will help you become a better writer.

- Northey, M., & Timney, B. (2012). Making sense in psychology: A student's guide to research and writing. Oxford University Press.

Course Web Page (Brightspace)

The course website is located at: <https://brightspace.carleton.ca>

On this site you will find the course outline, schedule, grading rubrics, assigned readings, and useful links. We will use the discussion forums to post questions on assigned readings.

Evaluation

Item	Due dates	Weight of Grade
1. Class Attendance and Participation	ongoing	15%
2. Reflection papers (2 x 5%)	Feb 17 & Mar 17	10%
3. Discussion Lead (once)	Jan – Mar	10%
4. Experimental Protocol and Ethics (group mark)	Feb 3	10%
5. Intro & Method (Draft)	March 10	10%
6. Methods & Results (Revised)	March 24	10%
7. Poster Presentation (group mark)	April 12	10%
8. Research Paper (Final version)	April 27	25%

Participation and Attendance:

Each weekly class includes one or two assigned readings for discussions. Student will be in charge of leading a discussion of research papers.

To facilitate in-class discussions, there are four formal requirements. Meeting these requirements will account for a significant portion of your final grade.

1. **Read** assigned articles before coming to class.
2. Submit **discussion questions** (via Brightspace) **by noon on Thursday**.
3. Write two **reflection papers** (see below) per term based on the assigned readings.
4. **Lead** a class discussion once during the term.

You may use a 'no questions asked' 3-day grace period for no more than one assignment. Once that has been used, late assignments without documentation will be docked 10% and late submissions will only be accepted up to one week following the deadline.

Discussion Participation

All students are expected to actively participate in class discussions. By **noon Thursday**, you must submit one question per paper to the 'Discussion Board' forum for the assigned week on Brightspace. Following your submission, you are encouraged to read what other students have posted. Participation grades will be out of two points each week – 1 point for submitting a discussion question, and 1 point for participating in class discussion. Please do not attend class if you feel ill. The participation point can be earned by engaging with

other student's questions on the discussion forum. You will also be asked to reflect on your own participation at the end of term and provide a self-assessment.

Leading Discussions

Students will lead one seminar discussion. The Discussion Leaders will have 10 minutes for their presentation and 10 minutes for discussion. When presenting a paper, the Discussion Leader should introduce a research question raised in the assigned paper, describe examined hypotheses, describe methodology, cover key findings, discuss theoretical and practical implications. They are also required to introduce new, related ideas by presenting at least one article that was not assigned for reading. You may draw on articles that are cited by or cite the assigned reading.

The presentation of a paper will be followed by its discussion. The Discussion Leader will use the discussion questions that students submitted to Brightspace to stimulate debate, and to coordinate the involvement of all students in active engagement with the major issues raised by assigned readings.

Written Assignments

All written work will be evaluated for content, style, grammar, spelling, and clarity -- and Strunk & White will be helpful in this regard. Furthermore, APA format (i.e., the format for much of the work published in cognitive science journals, as specified by the American Psychological Association) will be required and assessed. Further details will be provided on specific guidelines for presentation and writing. All assignments and papers should be typed and double-spaced with 1 inch (2.54 cm) margins. Pages should be numbered consecutively, starting with the title page. Do not include extra white space between sections. If you want to start a new page, use a hard page break.

All written assignments will be submitted via Brightspace. Marked papers with feedback will be returned to you via Brightspace. A grading rubric for all assignments will be available at the course webpage and will be discussed in class.

Reflection Papers

The reflection papers will allow you to practice writing and to organize your thoughts around topics discussed in class. Reflection papers should summarize one of the papers read for class and explore *one or two main points* in depth. For example, you could question a finding, method, or interpretation, offer an extension or application of an idea, or speculate about the function of a phenomenon. You are encouraged to integrate your personal experience and expertise or consult other sources (appropriately referenced). Please note that you cannot write your reflection paper on the paper you've led the discussion on. Use these papers to explore a reflection, reaction, question, etc. stimulated by the assigned readings. Feedback will be given on the papers but full marks are awarded for completing the papers. The aim of these papers is to encourage you to think more deeply about research discussed in class, not to formally assess your writing.

You are to submit Reflection Paper 1 by Feb 17. Reflection Paper 2 is to be submitted by Mar 17. Reflection Papers should be no more than 2 pages and should follow APA style. The reflection papers are due via Brightspace.

Research Project

You will be required to execute and write-up a research project. A list of potential experiments will be provided. You will form small groups of between 3-4 people and choose a project. Groups will implement the experiment and collect the data together and prepare a methods section, however, **each student will hand in a separate paper at the end of the term**. Various aspects of methodology, design, ethics, data collection, and writing will be discussed in the labs and class so that everyone is prepared to complete the project.

1. The group will need to prepare an informed consent and debriefing form that must be approved by the professor before data can be collected.
2. The group will prepare the experiment and administer it to other classmates, friends, etc.
3. The group will enter the data, as directed in the data entry lab.
4. Each individual will participate in the data analysis lab, and analyze their data (descriptive and inferential statistics).
5. Each individual will prepare an APA-style method and results section.
6. Each group will present their findings in the form of a poster presentation, similar to those you would see at academic conferences. The 'poster production' lab will provide all the information students need to prepare a poster.
7. The final paper, complete and in APA format, is due by submitting it through Brightspace on the last day of final exams.

Seminar Schedule

All readings will be made available on Brightspace so please be sure to check Brightspace every week before class.

Week (Date)	Topics
1 (Jan 13)	Introductions
2 (Jan 20)	Research Ideas and Hypotheses
3 (Jan 27)	Reviewing Literature
4 (Feb 3)	Variables and Measures; <i>Attention</i>
5 (Feb 10)	Experimental Design; <i>Reasoning</i>
6 (Feb 17)	Open Science; <i>Memory</i>
	WINTER BREAK
7 (Mar 3)	Data Analysis; <i>Social Cognition</i>
8 (Mar 10)	<i>Comparative Cognition</i>
9 (Mar 17)	<i>Neurodiversity</i>
10 (Mar 24)	Writing Workshop; <i>Peer Review</i>
11 (Mar 31)	Poster Workshop
12 (Apr 12)	Poster Presentations

This schedule is to be regarded as tentative.

Lab Schedule

Laboratory sessions are compulsory and will be held during the Thursday time slot. The teaching assistant will conduct the labs. A schedule for lab activities will be provided but may be modified or updated during the course.

Students are required to complete the TCP 2 On line Ethics Tutorial. Ethics will be discussed in the first lab. As noted, please use your Carleton Email when you are completing the tutorial. When you have finished it, provide a copy of the completion certificate to the TA.

<http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/>

Week (Date)	Topics
1 (Jan 12)	No Lab
2 (Jan 19)	Research Ethics
3 (Jan 26)	Experimental Design; APA Style
4 (Feb 2)	Experimental Design Continued
5 (Feb 9)	Pilot Study & Writing Lab
6 (Feb 16)	Data Collection Lab
	WINTER BREAK
7 (Mar 2)	Data Analysis
8 (Mar 9)	Data Analysis & Writing Lab
9 (Mar 16)	Optional Work Period
10 (Mar 23)	Optional Work Period
11 (Mar 30)	Optional Work Period
12 (Apr 6)	No Lab

Additional Information

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Plagiarism

The University Academic Integrity Policy defines plagiarism as “*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.*” This includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

- any submission prepared in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one's own; and
- failing to acknowledge sources through the use of proper citations when using another's work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

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Statement on Student Mental Health

As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

Emergency Resources (on and off campus): <https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/>

Carleton Resources:

- Mental Health and Wellbeing: <https://carleton.ca/wellness/>
- Health & Counselling Services: <https://carleton.ca/health/>
- Paul Menton Centre: <https://carleton.ca/pmc/>
- Academic Advising Centre (AAC): <https://carleton.ca/academicadvising/>
- Centre for Student Academic Support (CSAS): <https://carleton.ca/csas/>
- Equity & Inclusivity Communities: <https://carleton.ca/equity/>

Off Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, <https://www.dcottawa.on.ca/>
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, <http://www.crisisline.ca/>
- Empower Me: 1-844-741-6389, <https://students.carleton.ca/services/empower-me-counselling-services/>
- Good2Talk: 1-866-925-5454, <https://good2talk.ca/>
- The Walk-In Counselling Clinic: <https://walkincounselling.com>

Statement on Pandemic Measures

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are [a number of actions you can take](#) to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette.

Feeling sick? Remaining vigilant and not attending work or school when sick or with symptoms is critically important. If you feel ill or exhibit COVID-19 symptoms do not come to class or campus. If you feel ill or exhibit symptoms while on campus or in class, please leave campus immediately. In all situations, you should follow Carleton's [symptom reporting protocols](#).

Masks: Masks are no longer mandatory in university buildings and facilities. However, we continue to recommend masking when indoors, particularly if physical distancing cannot be maintained. We are aware that personal preferences regarding optional mask use will vary greatly, and we ask that we all show consideration and care for each other during this transition.

Vaccines: While proof of vaccination is no longer required to access campus or participate in in-person Carleton activities, it may become necessary for the University to bring back proof of vaccination requirements on short notice if the situation and public health advice changes. Students are strongly encouraged to get a full course of vaccination, including booster doses as soon as they are eligible and submit their booster dose information in [cuScreen](#) as soon as possible. Please note that Carleton cannot guarantee that it will be able to offer virtual or hybrid learning options for those who are unable to attend the campus.

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 response and health and safety requirements please see the [University's COVID-19 website](#) and review the [Frequently Asked Questions \(FAQs\)](#). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca.

Requests for Academic Accommodations

ACADEMIC ACCOMMODATION

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form ([click here](#)).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details [click here](#).

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living

environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/equity/sexual-assault-support-services>

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation will be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

Important Information

- Students must always retain a hard copy of all work that is submitted.
- All final grades are subject to the Dean's approval.
- Academic withdrawal for winter and fall/winter courses is March 15th, 2023.
- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <http://carleton.ca/ccs/students/>

For a list of dates and deadlines, including holidays and exam dates, please visit:

<https://calendar.carleton.ca/academicyear/>

<https://carleton.ca/registrar/registration/dates-and-deadlines/>