CGSC 4909(A): Honours Project
Course Outline
Fall/Winter 2023-24

Course Information

Fall / Winter
Dates: Monday
Time: 2:35 pm - 5:25 pm
Course type: In-person

Course prerequisites: 4th year standing, enrolment in B. Cog. Sc. Honours

Instructor Information
Instructor: Dr. Nadiya Slobodenyuk
Office: DT 2207
Phone: 613-520-2600 x 4210
E-mail: NadiyaSlobodenyuk@cunet.carleton.ca
Office Hours: In person: 1:30 – 2:30 pm on Wednesday and by appointment on other days
Over zoom: by appointment

1. Course Description & Objectives

Congratulations on making it to your fourth year at Carleton!

You will soon start a new chapter in your life applying for jobs or pursuing further education. The project course is designed to provide you with research experience and prepare you for graduate school or future career. The course extends over a full academic year. Students in groups of two to six undertake a research project within the scope of the course topic. They engage in a comprehensive investigation of one of the big questions in cognitive science and contribute by completing an original research project. Students undertake projects that represent a range of specific expertise across the various methodologies common in cognitive science. In the academic year 2023-24, CGSC 4909 group projects will focus on a variety of topics pertaining to AI including, but not limited to, cognition in large language models, public perception of autonomous agents, AI ethics.

2. Course Structure

We will typically meet in-person for a weekly 3-hour seminar during which you will have the opportunity to participate in discussions and peer-review activities, present readings, practice scientific writing and editing, and engage in other research-related activities and activities that prepare you for the job market. CGSC 4909 has two major components: 1) research skills component and 2) professional development and career preparation component. All activities and assignments are associated with one of the two components. They are designed to help you acquire skills necessary for graduate school or a research-related job.
3. **Student Learning Outcomes**

By the end of the course you will:
1. gain factual knowledge about risk perception
2. develop a subject matter expertise
You will also be able to:
3. analyze from the methodological standpoint and critically evaluate empirical research
4. recognize, explain, and juxtapose scientific arguments within the context of research on risk perception
5. construct and present evidence-based arguments
6. conduct constructive peer-review and respond to peer criticism of your work
7. use different methodologies in cognitive science
8. conduct and interpret statistical analyses
Additionally, you will:
9. improve scientific writing skills and skills of oral presentation and debate
10. acquire skills of project planning, management, and long-term collaboration

4. **Readings & Resources**

There is no textbook for this course. Readings will be assigned on a weekly basis and will be available on course [Brightspace page](#). Course Brightspace page also contains the course outline and schedule, course feedback tools, marking rubrics, and a variety of learning exercises and useful links. It is going to be a dynamic space with many opportunities for you to make a meaningful contribution to the course and connect with your peers.

5. **Course Assessment & Assignments**

Activities and assignments will be graded the following way.
### Fall Participation and attendance
- Presentations of reading assignments (individual assignment) x 3
  - $3 \times 4 = 12$
- Open-book methodology quiz (individual assignment)
  - 12
- Draft 1 of the Introduction section of the final paper
  - 0*
- Draft 2 of the Introduction section of the final paper
  - 0*
- Draft 1 of the Method section of the final paper
  - 0*
- Draft 2 of the Method section of the final paper
  - 0*
- Draft of the REB application
  - 0*

### Winter Participation and attendance
- Full statistical analysis (individual assignment)
  - 12
- Draft 1 of Results section of the final paper
  - 0*
- Draft 1 of Discussion section of the final paper
  - 0*
- Research portfolio (individual assignment)
  - 6
- Final paper
  - 34
- Poster presentation
  - 6

**Course total:** 100

* Drafts are not graded, but mandatory. You will receive feedback on your drafts. Writing drafts will help you prepare the final version of your paper. If the draft is late, a 20% penalty will be applied to the associated assignment.

** Points are given for submitting the Portfolio and integrating feedback.

** 6. Tentative schedule**

**Note that the schedule is tentative and is likely to be adjusted based on the needs of the class. “*” indicates that the activity or a deadline is likely to be changed or adjusted.**

#### FALL TERM

<table>
<thead>
<tr>
<th>Classes</th>
<th>Class Topics and Activities</th>
<th>Weekly Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 11</td>
<td>• Introduction to the course&lt;br&gt;• Introduction to the course topic&lt;br&gt;• Career preparation (invited speaker)*</td>
<td>Read the assigned article and be prepared for class presentation and discussion facilitation next week.</td>
</tr>
<tr>
<td>September 18</td>
<td>• How to read sources critically&lt;br&gt;• Discussion of the assigned readings</td>
<td>Read the assigned article and be prepared for class presentation and discussion facilitation next week.</td>
</tr>
<tr>
<td>September 25</td>
<td>• Types of research&lt;br&gt;• Discussion of the assigned readings&lt;br&gt;• Graduate student discussion panel*</td>
<td>Read the assigned article and be prepared for class presentation and discussion facilitation next week.</td>
</tr>
<tr>
<td>October 2</td>
<td>• Discussion of the assigned readings&lt;br&gt;• Recognizing a research problem&lt;br&gt;• Generating research ideas&lt;br&gt;• Validating research ideas&lt;br&gt;• Working in groups on the draft of the project proposal</td>
<td>Generating research ideas assignment. More information on Brightspace</td>
</tr>
<tr>
<td>October 9</td>
<td>Thanksgiving. No classes.</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Topics</td>
<td>Notes</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| October 16 | • Planning a research project  
• Scientific integrity  
• Review of study design considerations | Work with groupmates on research proposal. More information on Brightspace |
| October 23 | **Fall break. No classes.**                                             |                                                                     |
| October 30 | • Presentations of the project proposals and peer-led discussion  
• How to write a conceptually coherent paper  
• Writing an APA-style research paper  
• Writing an introduction to an APA-style paper | Find and read relevant literature. Be ready to discuss the structure of the Introduction section of your paper during our next class.  
Finalize the structure of the Introduction section of the paper. Submit Draft 1 of the Introduction section of the paper  
**Deadline:** Friday, November 3* |
| November 6 | • Peer-led discussion of the structure of the Introduction section of the research paper  
• Writing a Method section of the research paper | Submit Draft 1 of the Method section of the paper  
**Deadline:** Friday, November 10* |
| November 13 | • Presentations of the final study design and discussion  
• Planning statistical analyses | Submit Draft 2 of the Method section of the paper  
**Deadline:** Friday, November 24* |
| November 20 | • Working with human participants:  
• Ethical considerations  
• Logistics of data collection | Complete TCPS training and obtain a certificate. |
| November 27 | • Writing an ethics application workshop  
• Elements of open science | Submit a draft of your REB application  
**Deadline:** Friday, December 1* |
| December 4 | • Finalizing and submitting REB applications |                                                                     |
| December 8 | • Individual project consultations |                                                                     |
| Winter term | **Career services workshop: Hidden job markets, networking**  
**Finalizing the Introduction section of the paper**  
**Preparation for data collection** |                                                                     |
| January 8  | • Data collection / project consultations |                                                                     |
| January 15 | • Data collection / project consultations |                                                                     |
| January 22 | • Data collection / project consultations | Submit Draft 2 of the Introduction section of the paper  
**Deadline:** Monday, January 29* |
<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 29</td>
<td>• Data collection / project consultations</td>
<td></td>
</tr>
<tr>
<td>February 5</td>
<td>• Data collection / project consultations</td>
<td></td>
</tr>
<tr>
<td>February 12</td>
<td>• Data collection</td>
<td>Submit the research portfolio</td>
</tr>
<tr>
<td></td>
<td>• Preparing data for analysis</td>
<td></td>
</tr>
<tr>
<td>February 19</td>
<td><strong>Winter break. No classes</strong></td>
<td></td>
</tr>
<tr>
<td>February 26</td>
<td>• Processing data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Descriptive and inferential statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review of selected statistical analyses</td>
<td></td>
</tr>
<tr>
<td>March 4</td>
<td>• Review of the APA-style requirements for the Results section of the research paper</td>
<td>Submit full statistical analysis Deadline: Friday, March 8*</td>
</tr>
<tr>
<td></td>
<td>• Working on the Results section of the paper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Interpreting results</td>
<td></td>
</tr>
<tr>
<td>March 11</td>
<td>• Writing an APA-style Discussion section of the research paper</td>
<td>Submit Draft 1 of the Results section of the paper Deadline: Friday, March 15*</td>
</tr>
<tr>
<td>March 18</td>
<td>• Peer-led discussion of the Discussion section of the research paper</td>
<td>Submit Draft 1 of the Discussion section of the paper Deadline: Friday, March 22</td>
</tr>
<tr>
<td></td>
<td>• Career services workshop: CVs, Cover letters</td>
<td></td>
</tr>
<tr>
<td>March 25</td>
<td>• Communicating results</td>
<td>Submit the final version of your research paper Deadline: Friday, March 29*</td>
</tr>
<tr>
<td></td>
<td>• Preparing a research portfolio (cuPortfolio)</td>
<td></td>
</tr>
<tr>
<td>April 1</td>
<td>• Preparing a poster presentation</td>
<td>Prepare a poster presentation for next week</td>
</tr>
<tr>
<td>April 8</td>
<td>• Poster presentations</td>
<td>Congratulations! You’ve completed an amazing research project! No more assignments : )</td>
</tr>
</tbody>
</table>

### 7. Technical and Attendance Requirements:

You will need to use SPSS. The software will be installed on the classroom computers. However, if you want to use your personal computer, you will need to install the software. You do not need to purchase the software. Carleton University has a license for this software. Please follow the instructions on how to install and activate SPSS here: [https://carleton.ca/its/all-services/computers/site-licensed-software/spss/](https://carleton.ca/its/all-services/computers/site-licensed-software/spss/)

### 8. Class Policies:

- **Attendance**
  
  Attendance is mandatory for an honours project course. We meet once a week; every class is important for a successful completion of the project.

- **Extra credit**

  There is no extra credit in this course. Your final grade is a result of your performance on course assignments.

- **Communication**
I will be available for any questions, feedback, and help with the course material over the email throughout the week. I usually reply promptly and will certainly reply within two business days. I might not be able to reply during the weekend.

Office hours are held 1) in person: 1:30 – 2:30 pm on Wednesday and by appointment on other days, 2) over zoom: by appointment.

You can also post questions on our course Discord channel. I will check the course discord channel at least once a day.

Note that I will respond only to e-mail sent from your official Carleton University e-mail account containing your full name.

If you do not have or have yet to activate your Carleton account, you may wish to do so by visiting http://carleton.ca/ccs/students/

Outside the classroom, e-mail is the main means of communication in this course. You will receive regular updates and reminders on your e-mail. It is your responsibility to check your e-mail daily.

- **Missed classes**
  If you miss a class, please consult your classmates and ask for their notes.

- **Marking**
  Students have the right to see their marked work.

- **Carleton grading system**
  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
  - A   = 85-89
  - A - = 80-84
  - B+ = 77-79
  - B   = 73-76
  - B - = 70-72
  - C+ = 67-69
  - C   = 63-66
  - D+ = 57-59
  - D   = 53-56
  - D - = 50-52
  - F   = Failure. No academic credit
  - ABS Absent from the final examination
  - DEF Official deferral (see "Petitions to Defer")
  - FND "Failed, no Deferral" – assigned when the student is absent from the final exam and has failed the course on the basis of inadequate term work as specified in the course outline.

Standing in a course is determined by the course instructor, subject to the approval of the Chair and Faculty Dean.

All final grades are subject to the Dean’s approval.

- **Makeup policy**
  If health-related or unforeseeable personal circumstances prevent you from taking a test, you are expected to inform me ahead of time or on the same day. Any supporting documents must be presented in a timely manner as well. You will be given a chance to retake the missed exams at a time agreed upon with the instructor.

  If you receive zero for cheating or plagiarism on one of the assignments or an exam, you will NOT be given a second chance to fix your grade.

- **Learning support services**
  Centre for Student Academic Support and Student Academic & Career Development Services offer a variety of services designed to support student learning. For example, they offer group study rooms, free drop-in sessions with study skills
specialists and writing tutors, free academic skills workshops, networked computers, a tutor referral service, and supportive peer helpers. Visit their websites for more information:

https://carleton.ca/csas/
https://carleton.ca/sacds/

• **Petitions to defer**
Students unable to complete a final term paper or write a final examination because of illness or other circumstances beyond their control or whose performance on an examination has been impaired by such circumstances may apply within five working days to the Registrar's Office for permission to extend a term paper deadline or to write a deferred examination. The request must be fully and specifically supported by a medical certificate or other relevant documentation. Only deferral petitions submitted to the Registrar's Office will be considered.

• **Copyright policy**
Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s). The PowerPoint presentations, lecture videos, lectures notes, and other materials available to you on Brightspace and Carleton’s Media Space may not be distributed online.

• **Academic advising**
Visit the Cognitive Science Undergraduate Office, DT 2201 to discuss your program. Advisors can answer questions concerning:

- Course selection and meeting program requirements
- Your audit and transfer credits
- Gaining access to courses that are closed
- Information concerning prerequisites and preclusions
- Course equivalencies and substitutions
- Information about whether to pursue the (Honours Project Course) or the Thesis stream and CGPA requirements
- Community Practicum Course
- Concentrations
- Exchanges and course selection

Please contact undergraduate and graduate advisers by e-mail to schedule an appointment.

Undergraduate advisor:
Melissa Lett: melissa.lett@carleton.ca

Graduate advisor:
Uzma Khan: uzma.khan@Carleton.ca

• **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, including the unauthorized use of generative AI tools (e.g., ChatGPT);
- 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.

**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):**

**Carleton Resources:**

- Mental Health and Wellbeing: [https://carleton.ca/wellness/](https://carleton.ca/wellness/)
- Health & Counselling Services: [https://carleton.ca/health/](https://carleton.ca/health/)
- Paul Menton Centre: [https://carleton.ca/pmc/](https://carleton.ca/pmc/)
- Academic Advising Centre (AAC): [https://carleton.ca/academicadvising/](https://carleton.ca/academicadvising/)
- Centre for Student Academic Support (CSAS): [https://carleton.ca/csas/](https://carleton.ca/csas/)
- Equity & Inclusivity Communities: [https://carleton.ca/equity/](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/](https://www.dcottawa.on.ca/)
- Empower Me: 1-844-741-6389, [https://students.carleton.ca/services/empower-me-counselling-services/](https://students.carleton.ca/services/empower-me-counselling-services/)
- Good2Talk: 1-866-925-5454, [https://good2talk.ca/](https://good2talk.ca/)
- The Walk-In Counselling Clinic: [https://walkincounselling.com](https://walkincounselling.com)

**Requests for Academic Accommodations**

*If you are missing assignments / test and having difficulties meeting the expectations set for this course due to reasons outside of your control, please communicate with me in a timely manner so that I can come up with the best solution for your situation.*

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: [https://carleton.ca/equity/contact/form-pregnancy-accommodation/](https://carleton.ca/equity/contact/form-pregnancy-accommodation/)
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: [https://carleton.ca/FASS-FPA-teaching-regulations/accommodation/](https://carleton.ca/FASS-FPA-teaching-regulations/accommodation/)

Academic Accommodations for Students with Disabilities: The Paul Mento 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](mailto: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](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](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.
  - Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.
  - 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/](http://carleton.ca/ccs/students/)
  - November 15, 2023: Last day for academic withdrawal from full fall and late fall classes
  - March 15, 2024: Last day for academic withdrawal from full winter, late winter and fall/winter courses.

For a list of dates and deadlines, including holidays and exam dates, please visit: [https://calendar.carleton.ca/academicyear/](https://calendar.carleton.ca/academicyear/)