



REQUIREMENTS FOR HONOURS THESES – CGSC 4908

**IF YOU REQUIRE FURTHER INFORMATION, PLEASE CONTACT THE
DEPARTMENT @ cogsci@CARLETON.CA**

FINDING A THESIS SUPERVISOR

Research in Cognitive Science follows a mentorship model. Thus, typically, the topic of a thesis will overlap to a substantial degree with the research expertise of the thesis supervisor. Students should approach potential supervisors in the winter of their third year. Consider approaching potential supervisors with whom you have taken a class, for example. Students should make the effort to find out about the professor's area of research and be prepared to discuss their interests in that area. Most supervisors will not require students to have formulated a detailed outline of a potential project. However, the extent to which the student will be expected to lead the project will depend upon the individual professor and the discipline.

Students should investigate the research areas of potential supervisors, talk to other students, and then contact and meet with potential supervisors. Students should start this process in the third year (or the 2nd last year) of their degree, with the assumption that the thesis will be completed during the 4th year (or last year). All faculty members who are fully or partially appointed in the Department of Cognitive Science are listed on the website <http://www.carleton.ca/cognitivescience/>. Students should consider getting involved in research activities with their supervisor in the third year, in preparation for the honours thesis.¹

For supervisors, students can approach any faculty member at Carleton who has an appointment in Cognitive Science (see the website for the most current list). Adjunct faculty members² can

¹ Faculty members who hold grants from NSERC are eligible to sponsor students for summer research fellowships. These fellowships provide for full time (16 weeks) of summer employment. Participating in one of these fellowships between third and fourth year is an excellent way for students to get a head start on their thesis, to experience real research, to get to know their supervisor well (helpful for reference letters for scholarships or for graduate school). Deadlines are in February. Faculty members may also sponsor students to do I-Cureus projects. For more information, see <https://carleton.ca/discoverycentre/funding-opportunities/icureus/>

² An adjunct faculty member is someone who has an appointment at Carleton but who works mainly at some other institution or agency, such as Ottawa U, the National Research Council, Transport Canada, the Ottawa Hospital (and so on). Adjunct faculty who are associated with Cognitive Science are shown on the website. The reason a co-supervisor is required is that the

also supervisor honours projects, however, a co-supervisor from the Department of Cognitive Science is required as well. Ideally, the co-supervisor from Cognitive Science will also play a role in the student's research activities, although there are exceptions. The Undergraduate Supervisor or the CGSC 4908 instructor are always willing to discuss these issues with students, ideally before they are at the point of registering in the thesis course.

IDEAL SCHEDULE

Students who intend to graduate in June of their final year should ideally conform to the following schedule.

January-March of 3 rd Year	Register in CGSC 3908 (Honours Seminar). It is a prerequisite for CGSC 4908. Approach potential supervisors; Consult with Cognitive Science Undergraduate Advisor or the Honours Thesis instructor, if necessary. Once a thesis supervisor has been secured, students should submit a signed copy of the Honours Thesis Contract to cogsci@carleton.ca . The contract will ensure that when they request an override to register in CGSC 4908, the override will be approved. Students will not be able to register until they have submitted a signed contract.
Registration in CGSC 4908 – June	If this is your first registration – register in Section A for both Fall and Winter (Full Year Registration). Students who do not complete their thesis after the first registration can register twice more, in Section B (summer) and Section C (Fall and Winter). Note that you can only register in each section once.
March to Early September of Final Year	Discuss, with supervisor, reading and other preparatory work to be done over the summer (if any).
September – April	Plan, conduct, and analyze research. Start writing of preliminary drafts.
Last day of Exams in April	Deadline to submit final thesis to Thesis Advisor and to the course instructor (through BrightSpace).

adjunct faculty are not contractually obligated to supervise students and so sometimes they leave, change jobs, or some other unforeseen situation occurs which renders them unable to continue supervision. The co-supervisor would then take over primary supervision of the student.

CO-OP STUDENTS

Students who are registered in the co-op program may also register in CGSC 4908A in the Fall/Winter term of their fourth year, with the intention of getting started on their thesis. If possible, they may be able to continue working on the thesis in the Winter and Spring/Summer terms. It is permissible to be registered in one-half credit during a work term. When they return to school in September, they should register in 4908 C. Whether or not they register in 4908 B in the Spring/Summer term will depend on the student's individual circumstances. Please consult with the co-op advisor or the Undergraduate Supervisor in Cognitive Science for further information.

THESIS CONTENT

The following guidelines were developed to help students understand what the thesis consists of and how to successfully make progress towards completion of their degree.

1. An honours thesis in Cognitive Science is a work of original scholarship. It will include a critical overview of relevant literature on the topic. It will also include some original research -- an experiment, survey, critical analysis, analysis of archival data, or modeling activity. The exact form of this research activity will depend upon the area and the topic.
2. The final thesis document will include a written literature review (Introduction, Literature Review), a report on the research activity (Method, Results), and a conclusion/synthesis component (Discussion). Students are encouraged to display their interdisciplinary knowledge by drawing on more than one disciplinary perspective in the review or synthesis components of the thesis. However, expectations for the research activity will be more modest than for a Master's or Ph.D. level project, consisting of research that uses a single methodology (conceptual, experimental, linguistic, or computational).
3. Length, per se, will be variable. However, most honours theses are between 25 and 50 pages in length (excluding Appendices, References, and ancillary pages). Example theses are available on BrightSpace through the **Cognitive Science Honours Thesis Library**. Students who register for CGSC 3908 will have access to this BrightSpace page. Proceedings papers from the archives of the Cognitive Science Society are another useful source of examples of papers with a similar scope as an honour thesis. These archives are also useful as they contain examples of research projects that span all of the many perspectives that contribute to cognitive science. <https://cognitivesciencesociety.org/past-conferences/>
4. Students consult with their supervisor to make sure that there is a plan in place for making progress. The year goes by quickly. Empirical projects need to be initiated as early as possible to provide for time to collect and analyze data. All projects need to be broken down into manageable components, with interim deadlines. Students should expect feedback on written components from their supervisor. Agreement on submission dates for various components is very useful in ensuring good progress. Students should also expect to participate in lab meetings or to work with graduate students as part of the research

mentorship process. Note that although re-registrations after the first registration in the thesis are possible, these should be used only when there has been an unavoidable delay in thesis completion.

FORMAT OF HONOURS THESIS

The honours thesis document is a final document that may be read in future by other students. The most common format for the thesis is that used for Masters and Ph.D. Theses at Carleton. More information can be accessed from: <https://gradstudents.carleton.ca/resources-page/thesis-requirements/thesis-forms-templates-policies/> including a Word template.

The thesis will include:

1. A Title page (refer to the example below).
2. Abstract (maximum 250 words)
3. Table of Contents
4. List of Tables
5. List of Figures
6. Body of Thesis
7. References
8. Appendices, including ethics approval, measures used, any other special information.

Other aspects of formatting, such as the format of references and the type of citations, usually correspond to that of the supervisor's research area. For example, the format of the American Psychological Association (APA Format) is most common among researchers who do empirical (data collection) work. Students should verify requirements with their supervisor, who may have more specific suggestions. Students should keep in mind that a thesis is a final document, not a manuscript, and format it accordingly.

Your thesis supervisor may have additional requirements for the thesis format so make sure you consult with him or her before you start working on the document.

Margins can be 2.5 cm on all 4 sides. The text should be double-spaced and left-justified. Figures and tables should be placed in the text close to where they are mentioned. Footnotes must be numbered and may be placed at either the bottom of the page (preferred) or the end of the document. A complete list of references must be included; thus, every citation in the text should correspond to an item in the reference list. Format for references and for other aspects of the thesis can either correspond to the conventions of the American Psychological Association or to the accepted format of the discipline of the Honours Thesis Supervisor. The student should consult with the supervisor early on to clarify which format will be acceptable.

NUMBER OF COPIES

Only an electronic copy is required by the Department. It will be uploaded through the cuLearn site for the course (CGSC 4908). However, the thesis supervisor may require a paper copy as

well as an electronic copy. Note that you should send an electronic copy directly to the thesis supervisor because they do not have access to cuLearn. When the final grade has been decided upon and submitted, the Department will retain the electronic copy and upload a copy to the Honours Thesis Library on Brightspace. The Department may print a paper copy of the thesis to retain in the records.

LENGTH

Length is no substitute for quality. As a rough guide, the thesis should be between 30 and 60 double-spaced pages (approximately 8,000 to 15,000 words). The nature of the topic will help to determine the size of the paper.

STYLE

Style counts! A poorly composed thesis, no matter how worthwhile its content, is not acceptable. Therefore, include time for careful editing in your work plan. Footnote and bibliography (reference) form must be correct and the writing style clear and skillful. Consult the thesis supervisor for the appropriate format (as above).

Useful Resources for Writing

- W. Strunk Jr. and E. B. White, *The Elements of Style* (Macmillan: New York).
- *A Manual for Writers of Term Papers, Theses, and Dissertations* by K. Turabian.
- *The Psychologist's Companion: A Guide to Scientific Writing for Students and Researchers* by R. J. Sternberg.

An example title page is shown on the next page.

Note: Examples of Theses that are available in the Cognitive Science Thesis Library on Brightspace may not be formatted correctly so please do not use them as templates.

Title of Thesis: It Should Clearly Reflect the Subject of Your Thesis

By

First Name Last Name

A thesis submitted to the Faculty of Arts and Social Sciences
in partial fulfilment of the requirements for the degree of

Bachelor of Cognitive Science with Honours

Concentration in (insert concentration)

Thesis Supervisor (Supervisor's name)

Department of Cognitive Science
Carleton University

© YEAR

First Name Last Name