

INSTITUTE OF COGNITIVE SCIENCE

Thesis Organization Guidelines

All theses should, in the first instance, conform to the guidelines presented by the Faculty of Graduate and Postdoctoral Affairs (FGPA). These are available at:

<http://www5.carleton.ca/fgpa/thesis-requirements/>

The current document expands upon, but does not replace, those guidelines, which fully specify the formatting of the thesis with respect to issues such as spacing, pagination, margins etc. Hence, all thesis content, regardless of organization, is to be presented double spaced, with appropriate margins and so on, as decreed by the university. Reference and citation format should be selected to be appropriate for the dominating discipline. Most empirical theses in Cognitive Science use APA format, whereas computational theses and linguistic theses use alternative formats appropriate to their disciplines.

Note that all Carleton University theses are available for viewing online through the library: <https://curve.carleton.ca/167299e9-53e6-48d7-a28d-8af2f87719ec>

THESES SHOULD BE IN FINAL FORMAT BEFORE THEY ARE SENT TO THE EXTERNAL AND INTERNAL-EXTERNAL EXAMINERS. Ideally, all of the regular committee members will have read and approved the thesis before it is submitted for the defense. Although this latter recommendation is not required by the university (which only requires approval of the supervisor), adherence would probably reduce stress and increase thesis quality.

Assume that the verdict will be ‘accepted as submitted’ and plan accordingly. The thesis should be in final form, including all tables of contents, references, appendices etc; it should be presented in double-spaced, with the appropriate margins, with figures and tables embedded in the text. Anything less is an insult to the external examiner. The one exception is that the acknowledgements page is usually not included in the version sent to the committee, as it will be finalized after the defense.

TAKE HOME MESSAGE – IT’S NOT A DRESS REHEARSAL!

Thesis Organization

The Institute accepts two types of theses, which shall be referred to as the *traditional* model and the *integrated articles* model.

First principles: regardless of the specific organization chosen for the thesis, the major guiding principles should be those of coherence and flow. The thesis should be readable as a complete document, with a beginning, middle, and end. The concluding section should satisfactorily resolve the ‘thesis’ (hypothesis, questions whatever) that is outlined in the introductory section. **In summary, the student’s goal is to present a document that is coherent and readable as a connected whole. This goal may be achieved in a variety of ways.**

Traditional Model. The traditional model consists of a series of chapters (Chapter 1, 2, ... to Chapter X). Each Chapter follows sequentially from the one before and constitutes a major

section, such as Introduction, Literature Review, Experiment 1, .. General Discussion, and so on (or other titles as appropriate). The traditional model in the humanities might resemble a book; in the social sciences the thesis may resemble a multi-experiment journal article (though with different headings). Most of the theses in the Institute up to 2010 were in this format (e.g., see Jarmasz, 2003).

Integrated Article Model. In contrast, the articles model consists of a series of papers – either published or submitted journal articles or papers published or submitted to conferences as proceedings papers. The Faculty of Graduate Studies has adopted a policy on how such theses should be organized and specified requirements for copyright permissions, and other issues. Please refer to section 12.4 of the FGPA Thesis Preparation Guidelines. These theses will still be organized as Chapters, with Chapter 1 as the literature review, Chapter 2 as an overview of the methodology, separate chapters for each published article, and a concluding chapter. The formatting is the same. So this model will not look very different than the traditional model. Earlier versions of theses submitted in this format to the Institute should NOT be used as models because FGPA now has a clear policy.

Other Considerations

1. For any articles that are already published, either in journals or in archival conference proceedings, permission may need to be obtained to reproduce the article in the thesis. This is usually a straightforward process – for example, completing an online form. The permission statement and the accurate citation to the publication should be included at the beginning of the relevant section (Chapter or Appendix) containing the article.
2. Because the content of a published paper cannot realistically be altered, theses that are presented in either of the Articles Formats may need to include commentaries or qualifications in some form. For example, a thesis might require additional data or analyses not included in a (usually shorter) published article. The student and supervisor should make it clear how such supplementary information is integrated into the rest of the document. Further, committee members, as part of the defense process, might require additional discussion (or other commentary) to be added. Again, a suitable format or way of presenting such information should be suggested. Depending on the form of the thesis, these may constitute changes to the non-article portion(s) of the work.
3. Typically, articles included in the thesis will have the student as the first author (see FGPA guidelines). In general, students are discouraged from including articles for which he or she was only a minor contributor. It is more appropriate to summarize and refer to these in the ‘normal’ way as one would refer to any other article. The goal is to present a coherent body of work that addresses a specific ‘THESIS’, not to simply staple together every piece of work that the student has produced during the Ph.D. process.
4. A prior Master’s thesis should **not** be included as an article in the Ph.D. thesis, although it could of course be referred to in the normal way (see previous point).
5. It is possible that at the thesis defense, the committee might agree that a particular chapter or article should be omitted from the thesis. To the extent that the author and his or her supervisor have done a good job integrating the components of the thesis, omission of a whole section might rarely arise. However, the primary goal is to present an integrated story about a program of research and so all possibilities need to be considered in deciding whether any given segment should be included.

Thesis Length

It is impossible to specify a length for a Ph.D. thesis, as length will be determined by a variety of factors. However, most traditional theses are at least 100 pages of text (not counting appendices etc). Some stretch to 300 or more pages, although this is probably discipline specific (Psychology theses tend to be shorter; Linguistics theses tend to be longer). Length is of less importance than whether or not the student has addressed an interesting question and provided a reasonable attempt to answer that question.