THESIS PROPOSAL GUIDELINES

Vision Science Graduate Program, School of Optometry, University of Waterloo

I. Thesis Proposal
As a graduate student in the School of Optometry, you are required to write and present a thesis proposal. This requirement has been formalized as a milestone credit.

Both the PhD and MSc thesis proposals must be completed by the end of the third term of your graduate program if you are a full-time student. Individuals who have accelerated from the Master’s program to the PhD program must present their thesis proposal by the end of their fourth term of enrollment in the Vision Science Graduate Program. Part-time students must present their thesis proposal by the end of their sixth term.

Normally the PhD thesis proposal will be presented before the comprehensive examination, but the exact sequence is left up to the committee and yourself.

II. Evaluation of the Thesis Proposal
The purpose of the thesis proposal is to identify the scientific question(s) that will be the focus of your graduate research, explain why the question(s) are important, and describe how you will go about answering them. The Committee will take your written proposal, oral presentation, and your responses to all questions into account in reaching its decision. The Committee should receive the written proposal at least two weeks before the scheduled presentation.

The depth and sophistication of both knowledge and study design may differ between MSc and PhD proposals. However, both should include clearly identified questions, or hypotheses, and an explanation of how the questions will be addressed. The Committee will also expect to see a defined time line, showing the major milestones and planned completion dates for your project. Progress in your research to date is an additional consideration.

The decision may be pass, fail, or deferred.

A failure requires withdrawal from the program. A deferred decision requires a written explanation by the Committee and a fixed date for a revised proposal and subsequent presentation.

III. Overview of the presentation
The presentation will normally consist of a 20 minute oral overview followed by questions from your Committee. At the presentation you should demonstrate that you have suitable knowledge of your field, grasp of the necessary methods, understand the scientific context of the work, and have a credible plan for bringing the project to completion within the normal time limits for your program.
IV. Written Proposal Format
The completed thesis proposal should be no longer than 6 pages of text, not including figures and references. The text should be size 12 font with double-spacing and 1 inch page margins. References should be presented in the format typically used for publication in scientific journals for that area of research. Please see your supervisor for advice in preparing a relevant proposal for your graduate work.

A good model for the thesis proposal might include the following sections:

1. Introduction and a concise literature review to show that you have the background knowledge to carry out your project and to provide a context for your hypotheses.

2. Research progress to date. A separate section to describe your own contributions to date is appropriate.


4. Proposed experiments (from “How to get and keep an NSERC research grant” by I.H. Witten and J.I. Glasgow of Queens University):

   “A majority of your proposal should be devoted to a careful description of your research objectives and the methodology by which these objectives will be achieved. For the research plan, you should at least know how you are going to start out and have some ideas for future options. Be prepared to describe alternative scenarios for the later stages, which hinge on how the early research turns out. Be mindful of the need to evaluate your ideas, not just develop and implement them. If successful, what will be the effect of the research? Remember that your methodology must include a clear description of your overall experimental design and some indication of the statistical methods you will undertake to analyze your date.”

5. Milestones/Timeline. Provide a term-by-term list of objectives for your planned graduate program, including coursework, important goals for your experiments, data analysis and writing and defence of the thesis.

   Each Committee member should receive a copy at least 2 weeks before your presentation. The Graduate Coordinator will finalize the room booking/form preparation of your thesis proposal at your request.