

University of Windsor
Earth Science Graduate Program
Guidelines for Doctoral Research Proposal
61-700

The doctoral research proposal will normally be presented within 12 months of entering the Ph.D. program, and is designed to prepare a student for carrying out the research that will be embodied in their Ph.D. dissertation. There are three key components to this:

1. A thorough review of the literature relevant to the proposed research topic. It is expected that the candidate understands and appreciates the nature and significance of previous work.
2. An outline of the proposed research and how this builds on previous work. It is expected that the candidate will have an understanding of the expected contributions to the subject area and how these relate to previous work.
3. A description of the relevant methods that are expected to be used in the research. Specifically, the principles of the method(s), the nature of the data the methods provide, and why the methods chosen are appropriate to answer the questions to be addressed in the research.

The student will prepare a written report that addresses the above points, and give a public presentation that summarizes the proposal. The student shall then be examined by his or her advisory committee in private on the content of the proposal.

The supervisor may assist the student in the preparation of the research proposal and the research proposal must be submitted to the Graduate Coordinator.

The research proposal should be written in sufficient detail to allow a fair and full assessment of whether or not the student has the required knowledge and understanding to carry out the research. Presentation and defense of an acceptable research proposal is required to continue in the program.

Procedure

Upon completion of the written proposal, a copy shall be submitted to the Graduate Coordinator, who checks that it meets the criteria specified below.

A date and time is then set for the presentation of the proposal.

A copy of the written proposal is circulated to the advisory committee at least two weeks in advance of the presentation date.

A public announcement of the date and time shall be made at least one week in advance of the presentation.

The Written Proposal

The document text should be no more than twenty pages, double-spaced, 12-point font, with one inch margins. This includes figures, but does not include references and tables. The sections may be numbered.

The document should contain the following:

1. Title and abstract
2. Table of Contents
3. Introduction. This section should set-up the scientific problem that the thesis is attempting to solve.
4. Background and literature review. Provide a summary of previous work on the topic, or on similar areas of study. This should summarize our present state of knowledge about the topic in question. The student should demon-

strate that s/he has researched and understood the scientific literature that concerns the topic. Up to date references are important!

5. Objectives of the study. Provide a clear, succinct statement of the overall goal of the project. The general objective can be subdivided into specific sub-objectives or hypotheses.
6. Methodology and principles. This section comprises a description of the methods to be used to achieve the objectives and sub-objectives. The relevance of the techniques/methods should be indicated and, if there are other possible methods that are not being used, the reason why should be given. The student should demonstrate that s/he understands the principles behind the techniques or methods used in the study.
7. Significance of project. The student should be able to show that his/her topic is not simply a repetition of previous work, but is of some significance to the scientific community. If possible, the student should include potential applications of his/her topic.
8. Research to date. Provide a status report on the thesis topic. Summarize the progress, and show preliminary results, if available.
9. Feasibility and Milestones: List key stages in the research plan (milestones), along with anticipated dates for those milestones, given that the normal duration for a PhD is 4 years. In this, where appropriate, discuss the project feasibility; i.e. potential problems that may delay the progress of the research, and how these might be addressed. Make sure you consult with your supervisor on the feasibility of your research plan.
10. References. A list of references in standard journal format should be included.

The Presentation

The order of presentation is as follows:

1. Thirty-minute presentation of the proposal, which is open to the public.
2. Questions from the general audience. The general audience will then be asked to leave.
3. Committee Questions (external reader, internal readers, supervisor)
4. Committee meeting. There is a standard form that the committee will fill out that provides the student with some feedback. The committee may choose to:

Pass the student with no conditions

Pass the student with conditions (e.g. taking a specific course, etc.)

Require the student to re-do the proposal

If the student fails the proposal a second time they will be required to withdraw from the program.