

HEALTH SCIENCES 5901 (9901): MASTER'S THESIS POLICIES AND PROCEDURES for MASTER'S THESIS PROPOSALS and DEFENCES

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All relevant information about the Health Sciences master's thesis is on the D2L course site and applies to the thesis in both the Master of Health Sciences and Master of Public Health (admitted prior to 2022) programs.

Students who have documented disabilities/medical conditions and who require accommodations to successfully engage in the thesis should be in touch with Student Accessibility Services. More information is available at: Support for Students with Disabilities | Lakehead University

OBJECTIVES and COMPETENCIES

Our thesis-based programs aim to prepare students who will emerge as health researchers with advanced methodological and health-related education that enhances their understanding of health and their ability to contribute to the advancement of health. Through their thesis work, students will:

- Demonstrate advanced knowledge about, and critical analysis of, health and the factors that contribute to health;
- Identify, retrieve, and use appropriate sources of information and evidence;
- Critically analyze evidence in relation to the research methodologies employed;
- Synthesize and evaluate information to determine gaps, limitations, impacts, and implications, and make appropriate recommendations;
- Communicate effectively orally and in writing; and
- Work independently toward goals and deadlines.

This document provides an overview of:

- 1. Thesis timeline and evaluation of progress
- 2. Thesis committee
- 3. Thesis proposal
- 4. Ethics approval
- 5. Thesis defence
- 6. Final submission of the thesis

THESIS TIMELINE AND EVALUATION OF PROGRESS

Students in a thesis program should be in regular touch with their thesis supervisor for the duration of their program and beginning in their first term of study. Only the supervisor and student are required to sign the progress form submitted after the first term.

A (conservative!) timeline for thesis-related tasks and activities is available here: Thesis Timeline

SELECTION OF THESIS COMMITTEE

Students will work under the guidance of a thesis committee comprised of a supervisor (or cosupervisors) and one additional member of the Department of Health Sciences (full time faculty member or Adjunct faculty member).

The supervisor is selected from among Faculty in the Department of Health Sciences, who have a doctoral degree, current research activity, and recent publications. A co-supervisor can be a faculty member in the Department of Health Sciences, another academic unit at Lakehead, or another university; it can also be a professional (with a minimum of a master's degree) with relevant expertise. Co-supervisors external to the University must be approved as adjuncts.

Conflict of Interest

Conflict of Interest refers to the real or perceived potential for competing roles to affect the responsibilities of committee members. For example, when a potential committee member is employed by the supervisor or has a close personal relationship with the student or supervisor. If a conflict-of-interest situation exists, the individual may act as a non-voting member of the committee, and an additional committee member must be identified.

Addressing Difficult Situations

Difficulties arising between students and supervisors and/or committee members should first be addressed, and hopefully resolved, by the parties involved. Supervisory committee members and students are urged to discuss perceived problems early and to communicate any major problems to the program Graduate Coordinator. If a resolution is not achieved, the matter will be referred to the Department Chair and/or the Dean of Graduate Studies, through the Graduate Coordinator. Note that during any related meeting, students and faculty have the right to bring an advocate. If the dispute cannot be resolved, the student may take their issues/concerns to the Faculty of Graduate Studies Appeals Committee.



The Lakehead University Faculty of Graduate Studies Supervisory Policy provides additional guidance related to the roles and responsibilities of students, supervisors, and members of the committee; it can be found here.

THESIS PROPOSAL

This section provides *guidance* on content and length of the proposal. The student and thesis committee should discuss expectations early in the writing process.

It is suggested that the thesis proposal be approximately **30-40 double-spaced pages in length, excluding references**. Thesis formatting guidelines can be found <u>here</u>.

There is no requirement for an oral presentation. Once the written proposal is approved by all members of the thesis committee, the student will submit their work for ethical approval.

Introduction and Rationale (approximately 2 to 3 pages)

WHAT is the issue and WHY is it important? This section should set the overall scene for what is to come. This is also when you set the scene, and provide context and rationale for your work. Convince the reader the study is timely, important, and addresses a need or unresolved question.

- Introduction to the general topic area; provide basic information/data on the current situation
- Importance of topic (e.g., for target population, health system, broader field)
- What is the knowledge gap very briefly address key gaps in knowledge and their impact
- Specific scope of your research interest and how it addresses the knowledge gap
 - O Why this study, in this place, at this time?
 - Overall research aim/goal
 - O What will be the potential use and who are the potential users?

Literature Review (approximately 15 to 20 pages)

WHAT do we already know and HOW do we know it? This section defines the *conceptual* scope of your work and is intended to provide a well-organized overview of the research most closely related to your work. This section leads into your research questions and validates the rationale of your proposed work.

- Synthesize knowledge, information and data related to the issue; include info on key debates, conceptual/theoretical approaches, methodological research designs
- *Critically evaluate* the research that has been done in this area and the methodologies/methods that have been used to obtain it
- Identify gaps in the literature this can be something that has not been researched at all, not well researched, or could be researched differently

Research Questions and Specific Objectives (approximately 2 to 3 pages)

WHAT will your research focus on – i.e., WHAT questions are you asking? This section very clearly and explicitly tells the reader about the focus of your work and why you are doing it. The objectives of the current research project should ideally flow from the identification of gaps, and include a well-justified rationale for the need of the work. The questions will link directly to your methodologies and methods.

- Very briefly highlight the main limitations or gaps in the literature (1 or 2 sentences)
- Define the main research question, including the specific problem/outcomes and specify the determinant(s) and other factors that may be linked to the identified problem
- Discuss the specific objectives or questions that will be studied
- Ensure that you describe the potential contributions of your work to the broader field of health sciences, as well as to knowledge/practice/policy in your specific area of interest
- Briefly talk about how and with whom you plan to share your research findings

Methodology and conceptual framework (approximately 2 to 3 pages)

HOW will you approach the research? This section further demonstrates your knowledge of the different types of research used to study the topic (as described in the literature review), and informs the reader of the overarching approach to research you have chosen for this work. Examples of research approaches include: health services quantitative research, social determinants quantitative research, clinical epidemiologic research, health economy research, qualitative ethnographic research, eco-health approach, mixed methods, etc.

Clearly describe and justify the type of research you are going to do and include information on any other kinds of research your study is related to and/or informed by. For example, you might describe the conceptual framework that is specific to your research or adapted from existing framework(s). Your justification should inform on why your selection is appropriate and feasible.

Methods (approximately 10 pages)

HOW specifically will you do the research? The specific ways in which you will do the research must logically link to your research questions, objectives, and methods. The content of this section will depend on the nature of your study (qualitative or quantitative). Speak to your supervisor about the areas to be addressed in this section.

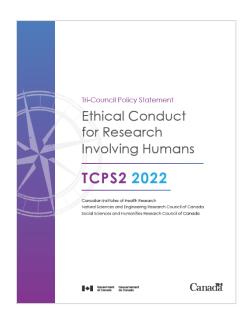
- Study design (including conceptual/theoretical framework(s))
 - o Describe and justify appropriateness/feasibility to answer your questions
- Study population
 - Who are your study participants and why? Provide high level criteria/characteristics, including the number of participants and rationale; recruitment, process, and timeline
- Data (this should flow from your study design and framework(s))
 - New Data Collection
 - Describe the methods that will be used and why (for example interviews (individual/focus groups etc., face to face, zoom, telephone, asynchronous, walk and talk etc.); include your interview guide as appendix
 - Describe the materials and instruments that will be used
 - Use of Existing Data
 - Describe existing databases that you will use and how the data was collected
 - Describe how/where the data is stored and how you will get access to it
- Concepts/Variables description and operationalization in the current study
- Hypotheses
- Data Analysis describe the analytical approach/framework(s)/statistical tests/models that will be used and why you will use them
- Research Rigour discuss the strategies you will use to ensure credibility and trustworthiness; discuss potential validity, causality, and generalizability and how you will mitigate biases and risks if applicable
- Ethical Considerations describe any ethical considerations relating to who you and/or your
 participants are (for example, if they are from a vulnerablized/marginalized group, does that
 require special considerations/actions?); describe any ethical considerations in relation to the
 methods you are using; describe how consent to participate is sought and what information is
 given to participants (and include the information letter and consent form in the Appendix)
- Overall study limitations discuss the strengths and limitation of the study design, data collection/databases, and analyses; describe any potential challenges specific to your work and how you will overcome them

ETHICS APPROVAL

All projects involving human or animal subjects must be approved by the Lakehead University Research Ethics Board (REB) prior to initiation of any form of recruitment or data collection.

Students must submit a copy of their TCPS 2 Core certificate along with their proposal to the REB. A link to the TCPS 2 course on research ethics can be found here. A certificate will be issued upon successful completion of the knowledge consolidation exercise.

Note that secondary analysis of existing, anonymized data is exempt from ethical review, as per the TCPS2; **however**, **an exemption must be requested** from the Research Ethics Board.



Process for submitting an ethics application

It is the responsibility of both the **student and supervisor** to ensure that all necessary ethics approval is obtained **prior** to beginning the study (e.g., recruitment, data collection).

The **student** prepares the ethics submission or request for exemption (if secondary data analysis) to the Lakehead REB, as well as to any other organization, if applicable. For example, if the student is recruiting from a healthcare organization, approval by that organization's REB may also be required.

Additional information about guidelines for ethical review, including information on how to submit an ethics application, is available through the Ethics & Research Integrity | Lakehead University.



THESIS DEFENCE

After receipt of ethics approval (or confirmation of exemption), the student will begin working on their research project. The type of activities undertaken will vary depending on the nature of the study, but may include: recruitment, data collection, transcription, data management, data analysis, interpretation, and write-up. It is expected that the student will work independently on these activities, under the supervision of the committee.

The committee will work with the student to identify the most appropriate format for the final thesis document. While the length of the document will vary, it usually falls within 70-100 double-spaced pages, excluding table of content, references, appendices. Formatting guidelines including examples of tables of contents can be found here.

The student will work closely with the committee to refine the document. The committee may request that the student complete several rounds of revisions prior to approval.

The External Examiner

All student theses are subject to external review. The External Examiner may be a faculty member in another academic unit at Lakehead University or at another university who is not affiliated with the Department of Health Sciences.

The committee works with the student to identify an appropriate external examiner, who:

- has a doctoral degree, current research activity, recent publications, and relevant subject matter and/or methodological expertise; and
- is at arm's length from the student and all committee members.
 - As an example, an Examiner that has a current/recent familial or close personal relationship with the student or committee member is not at arm's length.

It is the responsibility of the **supervisor** to complete the **Proposed Examiner** and **Confirmation of Arm's-Length Status** and submit them to the Administrative Assistant, for approval by the Graduate Coordinator.

Once approved by the Graduate Coordinator, the **Administrative Assistant** will be in touch with the individual to confirm their ability to act as an External Examiner. The student and members of the committee **should not have contact with the External Examiner** prior to the Thesis Defence Presentation.

The External Examiner must have at least two (2) weeks to review the thesis. External reviewer requests for additional time will be considered on a case-by-case basis.



Thesis Defence Presentation

The student will defend their thesis work in an oral presentation open to the public on campus. Videoconferencing may only be used if a committee member or the External Examiner cannot attend in person.

Before the defense can be scheduled, the **supervisor** must provide the Administrative Assistant with the **Thesis Ready for Review by Examiner** form, for sign-off by the Graduate Coordinator.

The **Administrative Assistant** will work with the student, supervisor, committee, and External Examiner to schedule a date/time for the defence, book the room/videoconferencing.

Except for the External Examiner, all committee members must attend the defence (in person or videoconference). The presentation will not take place unless the thesis supervisor and at least one other member (i.e., committee member or external examiner) are present.

REQUIRED FORMS:

Thesis Ready for
Review by Examiner
(Appendix 3)

Examiner's Report
on Thesis
(Appendix 4)

Report on Thesis
Examination
(Appendix 5)

At least 10 business days in advance of the Defence Presentation, the student must provide the Administrative Assistant with both a hard copy and an electronic copy of the final version of their thesis. The committee may also request a hard copy; all related costs are the responsibility of the student. Failure to adhere to this timeline will result in rescheduling the Defence at a later date.

Process Related to the Thesis Defence Oral Presentation

The student is given a maximum of 30 minutes to present on the following:

- Brief overview of the topic;
- Study objectives and rationale;
- Methods;
- Results;
- Implications; and
- Conclusions.

The Defence is chaired by the supervisor, who will:

- Ensure that the student does not exceed the 20-minute time allotment;
- Oversee the question period, including:
 - Inviting each committee member to pose questions each will be allotted 10 minutes to ask questions in each of a maximum of two rounds of questions (i.e., 20 minutes per committee member total, for a maximum of 60 minutes of questions).
 - Inviting members of the audience to pose questions (after completion of committee questions). Note that this question period may not exceed 15 minutes
- Oversee the deliberations of the committee, which should normally be completed within 45 minutes, after which the student will be invited to return.
 - Document all required changes on the *Report on Thesis Examination* form and obtain all committee members signatures within 5 business days of the defence and submit it to the Administrative Assistant.

FINAL SUBMISSION OF THE MASTER'S THESIS

The submission must be done in a way that meets the requirements of both the Department of Health Sciences and the Faculty of Graduate Studies. Information on the Faculty of Graduate Studies Thesis Process (Master's) must be carefully adhered to.

Submitting the final version of the thesis

Once the final version of the Thesis Document is accepted by the appropriate party (i.e., the supervisor or all committee members, including or excluding the External Examiner), the following actions must be taken by the supervisor, student, and Administrative Assistant.

The **student** must:

- Close the research project file with the Office of Research Ethics (i.e., submit the final report), and submit a copy to the supervisor and Administrative Assistant.
 - Note that this step is omitted if an exemption was received for the project.
- Work with the supervisor to transfer all relevant files and data to a secure file/computer owned by the supervisor;
- Delete all relevant files and data them from their own computer.
- Submit the following to the Administrative Assistant:
 - Evidence of closed research project file
 - o Electronic copy of the Final Thesis Document, in a locked pdf format
 - License to the University
 - Exit Survey Students may submit directly to the Faculty of Graduate Studies if preferred

The **supervisor** must:

- complete and sign the *Recommendation of Thesis* and *Thesis Ready for Final Submission* forms and submit them to the Administrative Assistant.
 - Note that if "appreciable revisions required" was selected, the revised document must be approved by all members of the committee;

Once the student has provided all documents, the **Administrative Assistant** will forward them to the Faculty of Graduate Studies.

Students are responsible for submitting their **Intent to Graduate** between:

- February and March for spring convocation,
- June and August for fall convocation.
- October and December for winter convocation.



