

BME1450
Guidelines for Thesis Proposal
Due Nov 14, 2016

It is never too early to start planning your thesis project or to learn how to formulate and plan an effective research study. The goal of this assignment is to teach you valuable research and writing skills while giving you a head start on your research. Your thesis proposal should be a culmination of your own research and thoughts thus far, along with feedback from conversations with your research supervisor, your peer review committee and other colleagues and lab mates. Looking ahead you will be required to submit a research proposal at your first committee meeting and even further ahead, you may be required to submit grant proposals.

Please submit (on Blackboard) a copy of your thesis proposal **on Nov 14, 2016**. The thesis proposal will account for 30% of your final mark and will be marked according to the attached evaluation sheet.

Your thesis proposal should contain the following Sections:

1. Title Page (include your and your supervisor's name and email, your degree program and departments, title of your work, and the IBBME research theme that best describes your project)
2. Abstract (<400 words)
3. Introduction to the motivating problem/rationale
4. Background/literature review
5. Research questions, hypotheses, and objectives
6. Specific aim(s) and methods
7. Expected results/outcomes (including a timeline and dissemination plan)
8. Significance/conclusions
9. References
10. Itemized responses to feedback from peer reviews

You may modify the order of components (4) and (5) if it improves the readability and flow of your proposal.

Formatting:

12 point Times New Roman font; 0.7" margins; single spaced; **4 pages** (not including title page, abstract, references, response to peer reviews, appendices, or figures). **The thesis proposal should be text only and is limited to the number of pages as outlined. Attach any references, tables, charts, figures and photographs in an appendix (e.g., appendix A: references; appendix B: figures/tables; appendix C: response to peer reviews). The appendices do not have any page restriction. Be sure to label your figures and tables and make proper reference to them in the proposal. For the purpose of grading your proposal, it should not depend on information in the appendices, other than references, tables, charts, figures and photographs, that is not included in the page limit of the research proposal. For grading purposes, the appendices will not be reviewed in detail other than to read references, tables, charts, figures and photographs.**

*Please note:

1. Examples of past students' **proposals** have been posted on Blackboard (i.e., **Course Materials --> Individual Assignment Instructions --> Thesis Proposal Guidelines**). While the format, level of detail, and presentation of these proposals may vary widely, they all have a number of things in common: effective communication, a convincing rationale and research challenge, well thought through methods that are feasible and innovative. Use these examples to aid your writing and learning experience, but please follow the formatting guidelines provided in this document.
2. The Writing Centre for Graduate Students (<http://www.writing.utoronto.ca/writing-centres/centres/graduate-students>) offers one-on-one consultations and writing workshops. This is a free resource that is available to all students at the UToronto.
3. For abstracts use language accessible to a lay audience. Describe the proposed research; for example: indicate how the proposed research can improve personal health, the health of populations, and/or the health delivery system. Abstracts should include: a **brief background** of the project; **specific aim(s) and the methodology** (action steps) to be used; **expected results**; and the **significance** of the proposed research, the unique features and innovation of the project, and/or the description of how your results will affect other research areas. **Therefore, please use the following headings in the abstract: Background; Methods, Results, and Significance**

Research Proposal Evaluation Sheet

Completed by:

Student Name:

Components	Description	Mark
Abstract	Short (<400 words); Presents a concise summary of what's to come including: background (i.e. rationale), methods, results (i.e., expected results), and significance	/10
Rationale/Motivating Problem	Describes the clinical or practical problem; Convincing rationale noting the social implications and/or need	/10
Background/Literature Review	Provides the reader with the knowledge needed to understand the proposed research; synthesizes previous research and knowledge in the field	/10
Objectives/Research question & hypotheses	Specific and focused; Quantitative and precise	/10
Specific Aim(s) & Methods	Sufficient detail to convey what and how you plan to address your objectives/questions; descriptions of special equipment, design, & protocols; description of planned data analyses	/15
Expected Results/Outcomes	Preliminary results (if applicable); Expected results; Timeline; Dissemination plan	/10
Significance/Conclusions	Description of the contributions your proposed research will make; What are the implications of your research?	/10
Citations/References	Appropriate formatting; key papers referenced; appropriate number to support proposal; mixture of types (e.g. journals and conference papers)	/5
Itemized response to peer reviews	Provides complete and thoughtful responses to peer review feedback; justifies choices and/or makes revisions as appropriate	/5
Overall		
Organization	Use of sub-headings; logical flow	/5
Presentation	Use of graphs, charts and figures; formatting	/5
Readability/grammar	Language, spelling, grammar	/5
	Total	/100

Additional Comments: