Structuring and Writing a Thesis
Part One: Getting Started

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Learning Outcomes for Part One

By the end of this presentation, you should be able to:

- Understand the requirements for the form and style of a thesis or dissertation at the University of Saskatchewan.
- Use strategies for minimizing anxiety, getting started and keeping going.
- Write a well-organized thesis that is written in academic style.
Overview of Screencast (Part One)

1. Differentiate between an IMRD and a manuscript-style thesis.
2. Discuss the form, style and tone of a thesis.
3. Look at strategies for reducing anxiety, getting started and keeping going.
4. Discuss the audience.
5. Present ideas for organizing your thesis.
6. Present tips from University of Saskatchewan supervisors.
The Thesis at the University Of Saskatchewan

- The words *thesis* and *dissertation* have different meanings and interpretations.
- For this presentation, the word thesis is used.
- Thesis requirements differ among colleges and departments, but there are common elements: See CGPS’s guidelines: https://students.usask.ca/graduate/thesis-preparation.php#
The Thesis at the University of Saskatchewan *(cont’d)*

There are different types of theses:

- A “standard” thesis, which follows the typical IMRD format (introduction, methods, results and discussion/conclusion).

- A “manuscript-style” thesis: a series of manuscripts suitable for publication but united around a common theme.

- Other types of theses, which may have a more personal or creative narrative structure.
Variations in the IMRD Thesis

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<th>Variation #1</th>
<th>Variation #2</th>
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<tr>
<td>Abstract</td>
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<td>Table of Contents</td>
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<td>Introduction</td>
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<td>Methods</td>
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<td>Discussion and/or Conclusion</td>
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<td>Appendices</td>
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# Manuscript-Style Thesis

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Abstract</td>
<td>Places thesis in context and describes overarching goals and hypotheses, main findings and significance.</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>Headings correspond to those in manuscript. Lists tables and figures. List of abbreviations/nomenclature is optional.</td>
</tr>
<tr>
<td>Introduction</td>
<td>Introduces background, reviews literature, identifies gap, overarching goals, may give overview of individual chapters.</td>
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<tr>
<td>Methods</td>
<td>Optional as a separate section.</td>
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<td>Individual manuscripts (often with transitional sections)</td>
<td>These are the manuscripts for research papers, with introductions, methods sections, results, discussion, and references; may include an abstract.</td>
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<tr>
<td>Conclusion</td>
<td>Discusses overall findings in relation to the literature. Links them to overarching goals/hypotheses. Discusses future work.</td>
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<tr>
<td>Appendices and supporting documents</td>
<td>E.g., Questionnaires, interview transcripts, consent forms, test materials, raw data, ethics approval, uncertainty analysis.</td>
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The Form and Style of a Thesis (U of S, CGPS)

- Form and style differ among disciplines and colleges.
- Departments are expected to give students style guides to follow, e.g., APA style guide.
- Consistency of style and form is critical.
- Final manuscripts must be grammatically correct and written in formal academic style.

https://students.usask.ca/graduate/thesis-preparation.php#Beforebeginning
The Style and Tone of a Thesis

- A thesis is analytical and critical.
- It uses reasoning to argue for a position, but it is non-confrontational.
- It uses documented evidence to advance the position.
- It is cautious and uses words that reduce strength of claim (e.g., may, possibly, seems).
- It uses specialized vocabulary.
- It includes definitions of terms if there is any ambiguity about the term.
The Style and Tone of a Thesis (*continued*)

- It avoids contractions (*e.g.*, *didn’t*).
- It avoids informal words (*e.g.*, *a lot*, *get*).
- It avoids phrasal verbs and colloquial language (*e.g.*, *run into*, *come up with*, *looking into*).
Reducing the Anxiety

- Take notes from meetings with your supervisor and advisory committee.
- Look at models of previous theses.
- Refer often to your proposal. Use it as a map.
- Attend thesis defenses if possible.
- Prepare a detailed work plan.
- Draft your thesis at the same time each day.
- Start with the part that you will find easiest to write.
- Don’t leave all the writing until after you’ve analyzed your data.
Getting Started and Keeping Going

- Set small, realistic goals.
- Setting *product* goals rather than *process* goals. *E.g., I will produce a page a day, not I’ll write for 2h per day.*
- Use a reward system.
- Use concept diagrams, idea trees and outlines.
- Write *anything*. It is easier to revise and polish than it is to write.
- Create a style sheet with reminders of style and formatting features.
- Plan to spend much of your time revising and polishing.

Your Audience – the Committee

Think clearly about your audience. Consider the following:

- Create a good first impression with a well-organized draft.
- Follow your committee members’ suggestions.
- Indicate in your revisions where you’ve incorporated their suggestions.
- Give your committee regular progress reports beyond requirements.
- Find out the likely identity of the external examiner and read his/her work.
- Take the initiative, but seek advice.
Numbering Headings in a Thesis

Chapter 1 Introduction and Review of Literature

1.1 Introduction

1.2 Review of Literature

   1.2.1 Cross-education

   1.2.2 Cross-education of Strength and Inter-lateral Transfer of Skill

       1.2.2.1 Models of Transfer, Lateralization, and Handedness

   1.2.3 Cross-education and Imagery Training

   1.2.4 Cross-education, Motor Imagery, and Semantic Memory

   1.2.5 Mechanisms of Cross-education of Strength

       1.2.5.1 Plasticity in the Brain ...

   1.2.6 Statement of the Problem

   1.2.7 Hypotheses

Organizing the Sections of your Thesis

Your readers will find your thesis easier to read if you use a few organizing principles.

- Include an introduction – a roadmap – at the beginning of each chapter, explaining the purpose and/or organization of the chapter.
- Include a summary at the end of each chapter that wraps-up key concepts.
- Introductions and summaries provide a frame for your chapters: they anchor your readers and give your thesis professional polish.
A Brief Introduction to a Methods Chapter

To measure the performance of a prototype HAMP, a test facility was constructed in the Fluid Mechanics Laboratory at the University of Saskatchewan. The facility was designed to … The design of the prototype HAMP and test facility and the instrumentation used to take each measurement are discussed in detail in this chapter.

HAMP stands for Heat and Moisture Transfer Panel

A Brief Summary to the Same Chapter

This chapter described the design of a prototype ceiling panel, which can simultaneously transfer heat and moisture. The test facility designed to measure the performance of the prototype HAMP was also discussed. The instrumentation used to take each measurement and the bias and precision uncertainty in each instrument were presented. …

Advice from U of S Supervisors

- Be wary of plagiarism: Use a plagiarism checker such as *Grammarly*.
- Write in plain language: Make life easier for your committee!
- Be consistent with organization, style and presentation.
- Keep on top of the literature.
- Make a case for your research and its contribution to the field.
- Inform your supervisor of all communications with committee members.
Summary

- The requirements for the form and style of a thesis at the U of S differ, but CGPS has established standards.
- Use strategies to reduce anxiety, to get started, to keep going and to work with your committee.
- Use an academic style and a consistent structure.
- Frame the chapters of your thesis with an introductory and summary paragraph.