Optional format for writing a thesis or a dissertation for quick submission to a journal

Some students may want to write their theses or dissertations with journal submission(s) in mind. To do this they must meet the OHSU Graduate Studies Guidelines (stated below). There are a few important differences between a manuscript and a thesis or dissertation. Recommendations for organizing the thesis or dissertation are provided for students planning 1 journal submission and for students planning 2 or more journal submissions (see Sections I, II and III below).

Guidelines from Graduate Studies at OHSU

https://www.ohsu.edu/school-of-medicine/graduate-studies/forms-and-policies . See "Degree Guidelines", Guidelines and Regulations for Completion of Master's and PhD Degrees.

"Main section of the thesis or dissertation. The body of the document should be organized into chapters and include an introduction, methods, results, discussion and conclusions. There is flexibility in the way this information can be organized into chapters. "

<u>Section I. General instructions for preparing a thesis or dissertation</u> in the form of one or more publishable manuscripts

If the work has been submitted for publication or has already been published, it may be desirable to use the manuscripts as the basis for preparing individual chapters. If manuscripts are used as the basis for preparing chapters, the overall style of each chapter should be similar. References should not be included with each chapter but rather included as a single listing following the main body of the document (usually after the Summary and Conclusions). See additional notes on next page.

Introduction. The purpose of the introduction is to elucidate the nature of the problem addressed by the thesis or dissertation research. The problem should be clearly presented, and its history discussed through a survey of the literature. The author should explain the rationale behind the scientific approach to the problem. This section typically closes with a brief statement of the project aims.

Material and Methods (or Subjects, Apparatus, Procedure). This section should contain descriptions of the procedures employed in the project. The methods should be presented in detail sufficient to permit another investigator to repeat the procedures.

Results. This section should contain the summarized data from scientific work performed by the author. The results should consist of a written description accompanied by tables, graphs, drawings, photographs or theoretical and statistical analyses where appropriate.

Discussion. This section should contain a discussion of the findings, their significance, their relation to the findings of other investigators and limitations to the study.

Summary and Conclusions. This section should contain an abbreviated statement summarizing the findings of the thesis or dissertation. This section should end with a clear statement of conclusions drawn from these findings.

References. References should be included in a single list following the main body of the document (usually after the Summary and Conclusions). References should include a full listing of authors and title of the article and conform to the style of a refereed journal.

Appendices, Tables, Illustrations, Abbreviations, Typing: See https://www.ohsu.edu/school-of-medicine/graduate-studies/forms-and-policies, Guidelines for Preparation of Dissertation and Thesis.

Copyright information

When students complete their theses or dissertations, they have the option to delay release of the published OHSU electronic dissertation or thesis for up to 3 years to allow time to complete publication(s). When the students submit their thesis or dissertation to the OHSU library for binding, they must sign a permission form to release (or not release) the document for electronic publishing, https://www.ohsu.edu/library/theses-dissertations-capstones-portfolios. On this form, they can indicate "Open Access" (immediate release) or "Delayed or Secured" release (up to 3 years). Students can also choose to partially release sections immediately (and then they must indicate the specific sections of the thesis or dissertation that should not be electronically released immediately). Some students may want to delay the electronic release of their thesis or dissertation but not for 3 years. Once the students have published their planned articles, they can contact the OHSU library to release their thesis or dissertation earlier (than the 3 years). Before signing the release form described above, it is wise if the students review the specific author guidelines of planned journal submissions for copyright and pre-publication rules. Students may need to contact a journal editor for specific guidance about an electronic publication of their thesis or dissertation.

If students want to use their previously published work(s) in their thesis or dissertation, they should contact their publisher for permission. If students know in advance when they are signing the author's agreement with their publisher that they want to use the article/book chapter in their thesis/dissertation, they can modify the agreement. The majority of publishers understand the role of graduate work and usually accommodate this exception to copyright.

The links below provide more context:

Addendum to Publication Agreement
Negotiating with Your Publisher from OHSU Library's Author Rights Course (section 3)
OHSU Library Thesis & Dissertations

Section II. Recommendations for preparing a manuscript in thesis form for submission to OHSU

There are a few differences between a journal submission and a thesis submission. However, the student can craft the thesis with this understanding and quickly revise the thesis for a journal submission.

Chapter 1: Introduction. One of the biggest differences between a thesis and a submitted manuscript (for publication in a healthcare journal) is the length of the introduction. For the thesis, there should be sufficient development of background information that:

- 1. Introduces the topic (with references) and explains why the topic is important.
- 2. Presents the informatics or bioinformatics nature of the project, and why it was an important topic to pursue.
- 3. This section typically closes with a brief statement of the project aims.

While most journals will want the above items in the introduction, a manuscript introduction is only a few paragraphs in length; many journal editors recommend a total manuscript word count of 3500 (JAMA) or 4000 (JAMIA) for original research. This word count typically does not include references, figures, tables or appendices (if allowed).

Chapter 2: Background. The background of the thesis should include a comprehensive review of prior work. This section also provides a summary of the gaps in the current literature. This section will be substantially longer than a background section in a manuscript. At the completion of the background section, students often fully state the project aims, research questions and hypotheses. Some students will include a conceptual model. The conceptual model, project aims, research questions and hypothesis can also be written as a stand-alone chapter or open the Materials and Methods chapter.

Chapter 3: Material and Methods. The methods of the thesis can be similar to the methods drafted for a manuscript. If additional information is needed to explain the methods these can be noted in sub-section or appendix (and later removed for submission to a journal). It is important that the methods refer to any conceptual model, stated aims, research questions and hypotheses.

Chapter 4: Results. The thesis allows the added opportunity for presenting interesting results that may not be directly related to the major research questions or hypotheses under study. For example, numerous tables of data may be acceptable in the thesis. These would likely be excluded from a submitted manuscript. Some journals now allow electronic appendices and these additional results could be submitted as an electronic appendix if it adds to the main theme of the paper.

Chapter 5: Discussion. Journal editors require a very focused discussion for their published manuscripts. A thesis, on the other hand, allows further space to be more thorough in discussing interesting findings from the analysis and will allow a more in-depth discussion of existing literature in the area of research. This section in a thesis also includes a thorough presentation of limitations of current work and recommendations for future work. Because of space limitations in a journal article, the future work section is often only a paragraph or two.

Chapter 6: Summary and Conclusions. This section will be very concise in a journal article.

References. Journal editors may limit the authors to 20 or 25 references. For the thesis there is no limitation on number of references and these will exceed 25. Each journal has a specific style so refer to the Author Guidelines for formatting your article.

Appendices, Tables, Illustrations, Abbreviations, Typing. Each journal has its own specifications for these items (see Author Guidelines).

Section III. Recommendations for writing a dissertation or thesis with two or more planned submissions

You may be planning several manuscripts within your dissertation or thesis. One approach that has been approved by OHSU Graduate Studies in the past is to use the stated aims at the end of the Introduction to organize the subsequent chapters. These may be stand-alone experiments or studies that will later be the basis for manuscripts. Students should provide the same level of detail recommended for a thesis with one planned submission, described in Section II. The organization for a dissertation or thesis with multiple planned papers might be as follows.

Chapter 1: Introduction. This section typically opens with a high level introduction of the topic and closes with the statement of the project aims (e.g., 3 aims) and associated stated hypotheses.

Chapter 2: Background. This section should include a comprehensive review of prior work across the stated aims. This section also provides a summary of the gaps in the current literature. This section will be substantially longer than a background section in a manuscript.

Chapter 3: Aim 1

- a. Introduction to Aim 1
- b. Focused literature review related to Aim 1. This section will include the most relevant literature addressing this aim.
- c. Conceptual model, research questions and hypotheses
- d. Methods to complete Aim 1
- e. Results of Aim 1
- f. Discussion of Aim 1
- g. Conclusions for Aim 1

Chapter 4: Aim 2

- a. Introduction to Aim 2
- b. Focused literature review related to Aim 2. This section will include the most relevant literature addressing this aim.
- c. Conceptual model, research questions and hypotheses
- d. Methods to complete Aim 2
- e. Results of Aim 2
- f. Discussion of Aim 2
- g. Conclusions for Aim 2

Chapter 5: Aim 3

- a. Introduction to Aim 3
- b. Focused literature review related to Aim 3. This section will include the most relevant literature addressing this aim.
- c. Conceptual model, research questions and hypotheses
- d. Methods to complete Aim 3
- e. Results of Aim 3
- f. Discussion of Aim 3
- g. Conclusions for Aim 3

Chapter 6: Discussion of findings of 3 aims. This section would contain discussion of findings across the three aims.

Chapter 7: Summary and Conclusions. This section should contain abbreviated statements summarizing the findings of the thesis or dissertation across the three aims. This section should end with a clear statement of conclusions drawn from addressing the three aims. For the manuscript submission, only the associated summary statements and conclusions would be presented (e.g., only the summary statements and conclusions from Aim 1 would be included in the manuscript for Aim 1).

References. As noted above in the OHSU Graduate Studies guidelines, the references for each chapter should be listed at the end of the dissertation (or thesis) and not at the end of each chapter. When submitting journal articles, the references specific to each article will be submitted and not the full list from the dissertation (e.g., only the associated references for Aim 1 would be included in the manuscript for Aim 1).