

Department of Biological Sciences Thesis/Dissertation Guidelines
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Goal: This document is to support the Graduate School's detailed [Doctoral Dissertation and Doctoral Scholarly Project](#) and [Master's Thesis and Creative Project](#) Format Manuals. The Graduate School's Format Manuals include detailed requirements with which all BS doctoral and Master's final dissertations and theses should align, excepting the few points detailed below. This document includes: (i) a few differences in expectations between the Graduate School and BS, and (ii) highlights often-neglected formatting requirements from the Graduate School manual.

BS alignment with Graduate School Format Manuals: All dissertations and theses from BS will align with the Graduate School formatting which follows the most current APA guidelines. Even if other programs follow other format manuals, *all BS* theses and dissertations must follow APA for all formatting. Some areas where the Grad School manual includes more details:

- Safety and Academic Integrity documentation requirements (yes, IRB and IACUC approval letters are part of your final dissertation/thesis).
- Formatting of preliminary pages (including the title page, signature page and abstract among other pieces).
- General formatting requirements through the main thesis/dissertation (pay careful attention to margins, figure/table requirements, page numbering, references, and headers – each follows APA style).
- Key components within the global Introduction chapter, including the goals/aims/objectives which span all data chapters.
- The global Results/Synthesis chapter following the “data” chapters, if the Journal Manuscript format is chosen, which is required to comprehensively summarize and synthesize findings across all chapters.
- A global Reference list, including cited sources across all “data” chapters within the Journal Manuscript format, is required; separate reference lists within each chapter are optional.
 - The Graduate School advises every student use [Recite Works](#) to crosscheck in-text citations with their Reference List(s), *prior* to submission!
- Graduating students are strongly encouraged to also locate word document files from recent BS graduates to use as working guidelines and/or templates, with the caveat that some formatting requirements may have changed since theirs was submitted.

Unique BS expectations: In nearly all cases, the Graduate School Format Manuals takes precedence over formatting of dissertations and theses in BS. The few exceptions, relating to chapter organization, are detailed as follows:

1. When using the Journal Manuscript Format, some chapters required in the Graduate School documents are OPTIONAL for BS theses and Dissertations. See possible chapter organization options at the end of this document.
2. Within the Journal Manuscript format, the Graduate School Format Manual for MS theses specifies that *MASTER'S THESES*, “contain one or more chapters as separate journal manuscripts, with each manuscript addressing separate identifiable, underlying themes or lines of research within the overall study.”

- a. BS also expects a minimum of **one data chapter** from MS theses using this chapter organization.
 - b. The BS Graduate Committee clarifies that a data chapter must include **original research** (including but not limited to primary field research, primary bench research, or primary education research).
 - c. A global Methodology chapter (covering all methods across data chapters) is optional.
3. Within the Journal Manuscript format, the Graduate School Format Manual for PhD dissertations specifies that *DOCTORAL DISSERTATIONS*, “contain two or more chapters as separate journal manuscripts, with each manuscript addressing two separate identifiable, underlying themes or lines of research within the overall study
- a. BS (by contrast) expects a minimum of **three data chapters** from a PhD dissertation using this chapter organization. All BS dissertations must meet this criteria.
 - b. The BS Graduate Committee clarifies that a data chapter must include **original research** (including but not limited to primary field research, primary bench research, or primary education research) or a **rigorous synthesis** (systematic review, scoping review, or meta-analysis).
 - c. A global Methodology chapter (covering all methods across data chapters) is optional.
 - d. BS expects that all doctoral students submit at least one manuscript to a research-advisor approved journal for publication prior to their defense date.

Allowed BS Thesis and Dissertation Chapter Organizations:

TRADITIONAL CHAPTER FORMAT

PhD Dissertation

Chapter 1: Introduction
 Chapter 2: Review of the Literature
 Chapter 3: Methodology
 Chapter 4: Results
 Chapter 5: Discussion and Conclusions

MS Thesis

Chapter 1: Introduction
 Chapter 2: Review of the Literature
 Chapter 3: Methodology
 Chapter 4: Results
 Chapter 5: Discussion and Conclusions

JOURNAL MANUSCRIPT FORMAT

PhD Dissertation

Chapter 1: Introduction
 Chapter 2: Review of the Literature (*optional*)*
 Chapter 3: Methodology (*optional*)*
 Chapter 4: Data 1 (Intro-Method-Results-Discuss)
 Chapter 5: Data 2 (Intro-Method-Results-Discuss)
 Chapter 6: Data 3 (Intro-Method-Results-Discuss)
 Chapter 7: Results and Synthesis†

MS Thesis

Chapter 1: Introduction
 Chapter 2: Review of the Literature (*optional*)*
 Chapter 3: Methodology (*optional*)*
 Chapter 4: Data 1 (Intro-Method-Results-Discuss)
 Chapter 5: Results and Synthesis†

*BS Theses and Dissertations may omit these individual chapters, if the content is already included in each data chapter and should then renumber chapters accordingly.

†This chapter represents a global synthesis and discussion of results across all data chapters.