Southern Methodist University

Thesis & Dissertation Guide

Bobby B. Lyle School of Engineering

Chapter 1 INTRODUCTION

The thesis, as a requirement in a student's graduate education at Southern Methodist University, serves the primary purpose of training the student in the processes of scholarly inquiry and writing under the direction of members of the graduate faculty. As such, it is a demonstration of your ability in research, analysis, and effectiveness of expression. After publication your thesis ideally adds to the store of human knowledge and serves as a contribution to future scholars and researchers. Because it bears the university's name, as well as yours, it represents the instructional and research functions of this university to the outside world. For these reasons, it is expected that your thesis be of the highest quality, in both content and form.

The Office of Research and Graduate Studies has prepared this *Thesis/Dissertation Guide* to provide information on policies and procedures which will assist you in this process. Some of this information addresses purely technical requirements; e.g. specifications for paper, print, pagination, and margins and other requirements, insuring that certain vital information is presented in an orderly, uniform manner. Included in this category are such items as the title page and abstract, among others. The appendix of this guide provides sample pages to assist you. A number of specifications reflect generally accepted conventions of writing, especially scholarly writing, that have evolved to aid communication between author and reader. As an overall guide, the principles of thesis writing are *clarity, correctness*, and *consistency*.

This *Thesis/Dissertation Guide* governs the framework for all theses originating from graduate studies in Dedman College, the School of Engineering and the Meadows School of the Arts. The Office of Research and Graduate Studies, which has prepared this *Guide*, has the final responsibility for the format of theses and dissertations from these schools. The *Guide* will take precedence on the formatting of the preliminaries, which are defined as the manuscript from the title page to the beginning of the text. (See p.5.) Because a thesis or dissertation should reflect the standards within each discipline, the format of the text and documentation will be in accordance with professional style manuals selected and approved by the departments. The titles of these style manuals are listed in the section titled MANUSCRIPT PREPARATION. Regardless of the manual of style used in the preparation of your thesis, certain specifications must be met and these are enumerated in the following pages. Should a conflict arise between the style manual and this *Guide*, this office will help you find a solution within the framework of the stated requirements.

In writing the thesis, you may call on a number of people for assistance. Your thesis advisor and committee provide guidance throughout the process, particularly in evaluating the content of the thesis and your adherence to the specified style manual. The Graduate Office of your school is available at most times to aid you in preparing an acceptable final manuscript. The initial thesis check provides the opportunity for a spot check and consultation. You, however, assume ultimate responsibility for the academic integrity of the manuscript, in addition to meeting deadlines for submission and correction. The best advice is to start early with the preparation of the thesis and meet the requirements of this guide.

The Lyle School of Engineering Graduate Office highly recommends the use of LaTex for preparation of all theses and dissertations, however it is acceptable to use MS Word.

Chapter 2 STEPS TO COMPLETE IN FINAL SEMESTER

The following is a checklist of required forms, listed by degree. Consult your department for the deadline dates posted for their completion.

Dedman College: Calendar and Guide available www.smu.edu/graduate/t_dguide.html

Contact: Barbara Phillips, Office of Research & Graduate Studies

M.A./M.S.-Thesis

- 1. Application for Candidacy to Graduate (ACG)
- 2. Thesis Release Form -signed by advisor
- 3. Oral Examination Committee Report-signed by committee members

M.A./M.S - NON-THESIS

- 1. ACG
- 2. Oral or Written Examination Report Form-signed by committee members

DOCTOR OF PHILOSOPHY

- 1. ACG
- 3. Recommendation for Admission to Ph.D. Candidacy- on file
- 2. Ph.D. Examination Committee Report Form- signed by committee members
- 3. Thesis Release Form- signed by advisor

Meadows School of the Arts:

Contact: Joe Hoselton, Meadows Graduate Office

M.A., M.M.T., M.M

- 1. Advisor's Clearance Statement
- 2. Application for Candidacy to Graduate (ACG)

Note: The Division of Music requires that additional forms be completed through their office. Each student anticipating graduation bears the responsibility for checking with their Division/Center office regarding additional forms.

Lyle School of Engineering

Contact: Jim Dees, Lyle Engineering Graduate Office

Ph.D. or D.E. or M.S. with Thesis

- 1. ACG*
- 2. Degree Plan*
- 3. Recommendation & Certification of Appointment of Supervisory Committee*
- 4. Admission to Candidacy (Doctoral only)
- 5. Report on Thesis or Dissertation and/or Final Examination*
- 6. Thesis/Praxis/Dissertation Release Form*
- 7. Copy of unnumbered abstract signed by advisor*
- 8. Copy of unnumbered half title page with signatures of committee members*
- 9. Survey of Earned Doctorates completed online at https://sed.norc.org/survey (Doctoral only)

Engineering will accept up to 6 hrs. transfer credit on MS level via *Transfer of Graduate Courses for Graduate Degrees* form.

Your first step in this process is to obtain an Application for Candidacy to Graduate Form (ACG) at the Graduate Office of **your school**. Check with your school for the deadlines for filing, which are scheduled at the beginning of each semester. An ACG filled out for the previous semester is NOT valid; you will need to re-file. The information on the ACG is important because diplomas will bear the names exactly as they appear on this form, and they will be sent to the address you designate on the ACG, if you are not attending the December or May commencement. For this reason, you need to indicate your intention regarding attendance at the commencements.

Forms required for your individual schools must be filled out and returned as soon as possible after filing for graduation. Departments generally have the copies of the forms required on hand or you can come by the Graduate Office and obtain them. Oral and Written Examination Report Forms must be filled out and returned by the deadline indicated at the first of the semester. All three forms must be returned to the Graduate Office of your school. The remaining forms are required for publication and will be explained at the appropriate time.

^{*} Also required for M.S. with thesis.

Chapter 3

PREPARATION OF MANUSCRIPT

Set margins: Left-1.5", Right/Bottom-1.0", Top-2.0" or 1.1"- depending on page

A manuscript generally has three main parts: The preliminaries, the text and the reference material. Place these in the following order:

Preliminary Pages

- 1. One blank page (do not number)
- 2. Half-title page (do not number but count in pagination)
- 3. Title page (do not number but count)
- 4. Copyright page (optional, do not number but count)
- 5. Acknowledgment page (optional, begin numbering with lower case Roman

numerals) Place here only if you also have dedication page

- 6. Abstract
- 7. Table of Contents
- 8. List of Illustrations
- 9. List of Tables
- 10. List of Abbreviations
- 11. Glossary
- 12. Acknowledgment OR Dedication page

(if only one is used. Dedication page is not numbered)

Text

- 13. Introduction or Chapter 1
- 14. Text

References

- 15. Appendix or Illustrations
- 16. Bibliography or References
- 17. One blank page (do not number)

Approved Style Manuals

This guide will dictate the format for all preliminary pages. The text, all materials included in the text, and references should reflect the requirements of the discipline, and documentation should be in accord with professional style manuals. The Graduate Office does reserve the right to ask for some deviations from the style manuals. The following is a list of style manuals approved by the departments. If your department is not listed here, obtain the name of the approved style manual from your department's Graduate Office.

The most frequently used manual of style within Dedman and Meadows and Lyle is *A Manual for Writers of Term Papers, Theses and Dissertations*, 5th edition (Chicago, 1987) by Kate L. Turabian, which will be used for:

History Art History
Mathematics Anthropology
Music Chemistry

Economics Lyle School of Engineering

The American Psychological Association Publication Manual, 4th edition can be used by the following departments:

Psychology Television/Radio

Music Therapy Lyle School of Engineering

The Chicago Manual of Style, Thirteenth Edition, Revised and Expanded

English

Religious Studies

Geological Union Guideline for Journals

Geological Sciences

Description of the Preliminary Pages

- 1. Place one blank page at beginning and end of manuscript.
- 2. Half-title page—(2" top margin) This signature page is an approval page that the thesis/dissertation committee members sign after the student passes the oral defense. Prepare the signature page on high quality printer paper. The committee only needs to sign one original, which goes to the Graduate Office. Do not number this page. (See sample page)

- 3. **Title page—(2" top margin)** For this particular page, disregard the format and wording provided in Turabian or any other style manual. Follow the specific form provided in the sample page. Do not number this page. (See sample page)
- 4. **Copyright page—(2" top margin)** This page is **optional**. If included, do not number. (See sample page) A registered copyright is available through UMI for Ph.D. candidates who wish to have their dissertations microfilmed. Note that UMI provides this service. If you have questions regarding copyrights, contact:

Registrar of Copyrights Copyright Office Library of Congress Washington, DC 20559 (202) 287-7250

- 5. Acknowledgment page—(2" top margin) This page is also optional, although it is usually included. If you wish to include an acknowledgment ONLY (no dedication page), then place it just before the text. (See listing under MANUSCRIPT PREPARATION.) If you are going to include both a dedication and acknowledgment, then place the acknowledgment here. Number this page with Roman numeral iv if copyright page is included or iii, if no copyright page is included. All Roman numerals are centered one inch from the bottom of the page. Be sure that all page numbers are the same font and size as your text. (See sample page)
- 6. **Abstract page—(1.1" top margin)** The thesis or dissertation must contain an abstract. This is a concise summary of the thesis, intended to inform a prospective reader about its content. Usually this includes a brief description of the problem investigated, the procedure or methods, the results and the conclusions.

Headings from the text should be omitted in the abstract. It should not contain parenthetical citations of items listed in the bibliography or reference section. A reasonable length for an abstract is 300-400 words. Like the text, it must be double-spaced. The thesis/dissertation title needs to have the same layout as used on the half page and title page. The page number depends on what has been included to this point. Number with the next consecutive Roman numeral. (See sample page)

7. **Table of Contents—(1.1" top margin)** This is essentially a topic outline of the thesis, compiled by listing the headings in the paper, including as many subheading levels as you choose. Keep in mind that there is no index in a thesis, and thus a fairly detailed Table of Contents can serve as a useful guide for the reader.

Type the heading "TABLE OF CONTENTS at the top of the page, allowing a 1.1" margin from the top. List the divisions of the thesis that <u>follow</u> this page, beginning with the LIST OF FIGURES or TABLES, if applicable, and continuing through any other items that follow the Table of Contents, the text, and the back matter. <u>Do not list</u> anything that precedes the TABLE OF CONTENTS.

List all chapter headings and other major divisions. Be consistent in listing headings and subheadings; e.g., if you list the second-level subheadings from one chapter, list the second-level subheadings from all chapters. Be sure that the headings listed in the TABLE OF CONTENTS match word-for-word the headings in the text. Capitalization should also follow what is used in the text. Do not, however, underline headings that may be underlined in the text. Also, if you use all capital letters for your table heading, use headline style capitalization in the LIST OF TABLES.

Page numbers and chapter numbers need to be right justified in TOC. The use of dot leaders to connect each heading with its page number, which is used in Turabian, is optional. Whichever you choose, leaders or no leaders, be consistent throughout. Each level of subheading should be indented 3 character spaces from the beginning of the previous title. Also indent run-over or wraparound lines 3 character spaces. (See sample page)

8.- 11. **List of Figures, Illustrations, Tables, Glossary**, or other lists—(2" top margin) Include a list of figures, illustrations, etc., if you have one or more items in these categories. Use a separate page for each list, even if both would fit on the same page. Type the heading--for example, "TABLES" or "LIST OF TABLES"--allowing a 2" margin from the top. All major headings need to be all capitalized.

On these lists, include the number, caption (title), and page number of every figure and table in the body of the thesis. You must also list figures and tables in the appendix if they have individual numbers and captions. List captions exactly as they appear in the text, if they are relatively brief. If they are long, stop at the first period or other logical stopping point.

Double spacing must be used between entries. Single entries that exceed one line are **single**-spaced and the 2nd/3rd lines are indented 3 character spaces. Use dot leaders if used in TABLE OF CONTENTS. **Right justify** all page numbers.

12. **Dedication page—(2" top margin)** This page is **optional**. Place dedication page here, if you choose to use one. (See sample page) Do not number this page. If you have ONLY an acknowledgment page and no dedication page, place acknowledgment here and number appropriately with a Roman numeral.

This ends the preliminary pages and the next page will begin the text. Your thesis/dissertation must adhere to the general guidelines listed under "TECHNICAL REQUIREMENTS." All other questions regarding the style (footnotes, references, use of equations in text, layout of figures, graphs, illustrations, bibliography, etc.) will be left to the thesis advisor and will be dictated by the style manual for your department and discipline.

Technical Requirements

The following requirements apply to the entire thesis/dissertation without exception.

Margins— The left margin (binding side) of all pages need to be 1.5 inches; the top 1.1 inches, right and bottom margins are one inch. (1") This applies to tables, figures, and appendices as well as text. EXCEPTIONS to this rule are pages with major headings (e.g., the first page of each chapter, list of figures, illustrations or abbreviations acknowledgments, bibliography or appendix). The headings of these pages will be 2.0 inches from the top of the page.

Font Style/Size-- The thesis/dissertation must be **double-spaced** on only one side of the 8 1/2" by 11" page. Allow 2 character spaces between sentences. It must be typed with the same font and typeface throughout. Exceptions can only be made in the wording *within* the figures and tables when a different computer graphics program or when the figures and tables are enlarged or reduced prints these. *The captions and labels of the figures should be in the same size and font as the text.* Figures and tables not inserted in text must be centered horizontally and vertically on a separate page. Oversized figures and tables should be avoided. If reduction is impossible, try dividing large charts into sections and arrange on continuing pages of standard size. Photographic reproduction is another method of arranging oversized material on regular size paper. If none of these techniques will work and an oversized paper must be used, consult Turabian for information on folding the sheets. (Turabian 7.44-7.46) or bring samples to your graduate office for advice.

Individual footnotes or endnotes, blocked quotations, bibliographies, and figure legends will be single-spaced, with a double space between entries.

A standard font type and size should be used. These would include Courier and **Times New Roman** (**preferred**), **10 or 12**, among others. If you have any questions about a font type or size, bring a sample to the Graduate Office for approval. If you choose to use boldface, use it sparingly so that it is effective and use it in a consistent manner. For example, if you choose to bold chapter titles, they must all be bolded. Do not bold two items in a row; this would be counterproductive. The same judgments would apply when using *italics*.

Pagination-- Small Roman numerals (i, ii, iii, iv, etc.) will be used for the preliminary pages (see III-A) and these will be centered and one inch (1") from the bottom. If you count *but do not number* the half page and the title page, then the page following the title page will be page iii. This could be the copyright, acknowledgment or abstract page, depending on what you choose to include. Continue numbering with Roman numerals until you reach the text.

For the remainder of the manuscript, including the text, illustrations, appendices, and bibliography, Arabic numerals are used. All page numbers are **footers**, centered at the bottom, allowing a 1" margin.

Paper -- The paper recommended for presentation at your defense is a high quality printer paper.

Photographs: The techniques for reproducing photographs have advanced to such a degree that both black and white and color prints can be effectively used. You will want to get the best quality reproductions if you elect to use photographs in your manuscript.

The Lyle School of Engineering highly recommends the use of LaTex for preparation of all theses, dissertations and technical papers, however use of MS Word is acceptable provided all formatting guidelines contained in this guide are followed.

Chapter 4

APPROVAL AND FINAL SUBMISSION OF THESIS/DISSERTATION

Approval

Check the posted Calendar of Important Deadlines for deadlines.

(www.smu.edu/graduate/t dguide.html) The steps for final approval follow this pattern:

- 1. A signed Release Form (Thesis advisor)
- 2. Initial sample check (School's Graduate Office)
- 3. First formal check (School's Graduate Office)
- 4. Final check (Office of Research and Graduate Studies)

Signed Release Form

The first person to evaluate the content and format of your thesis/dissertation is your thesis advisor. At the beginning of the semester of anticipated graduation, you should send your thesis major advisor a draft of the thesis and a Release Form. Some departments have set deadlines for advisor checks. The thesis advisor will sign the Release Form as evidence that he or she has read and approved the thesis, both for content and adherence to the authorized style manual for that department. Any thesis/dissertation that has not been read and released by the thesis advisor will not be accepted for a check by the school.

Initial Sample Check

You are encouraged to bring a sample of your thesis/dissertation for an initial check to your school's graduate office. Samples should include such items as the title page, table of contents, one chapter, a sample of figures or illustrations, and one sample reference or bibliography. Identifying problems at this early stage, if any exist, will make the process easier in the latter stages.

First Formal Check

After the thesis advisor has approved your manuscript, bring a copy of the thesis and the signed **Thesis Release Form** to the graduate office of your school. Again, there are stated deadlines for this step and these dates will be posted in your school's graduate office. For all graduate programs in Lyle, the Office of Graduate Studies in 353 Caruth Hall is your graduate office. The copy of the thesis /dissertation that you submit should reflect a finished manuscript. Corrections and additions can still be made but the bulk of the writing of the text should be finished. The thesis at this point should comply with the format specified in this guide and be free of errors in grammar, syntax, headings and spacing. Students who have passed an oral

examination before the graduate office's check must submit the half-title page bearing the signatures of the committee members.

Final Check

After having passed the first two checks, you will submit a corrected thesis, along with the correction lists from previous checks and the Thesis Release Form (signed by the thesis advisor and the your graduate office) to the Graduate Studies Office, 353 Caruth Hall. If all corrections have been satisfactorily completed, the thesis/dissertation will be released. This office will not release a thesis that has not been inspected and approved by a thesis advisor and the Graduate Office of your school.

Final Submission

Electronic copy (ETD): The ETD is similar to the old paper counterpart. It has figures, tables, footnotes, and references. The title page includes your name, the name of your school, and the names of your committee members. The ETD documents your years of academic commitment. The major organization of the chapters relate why the work was done, how the research relates to previous work as recorded in the literature, the research methods used, the results, and the interpretation and discussion of the results, and a summary with conclusions. In other words, everything that was required for the paper version is still required.

Electronic submission provides a technologically advanced medium for expressing and disseminating your ideas. You prepare your ETD using a word processor or other software (LaTex is recommended) and submit the final copy to ProQuest either in a PDF or in the original program, which ProQuest will convert to a PDF. No paper copies will be required. You will find the LaTex style file at http://www.smu.edu/graduate/thesisinfo.html

All additional information on ETD submission can be found at: http://lyle.smu.edu/students/graduate_enrollment_thesis.html_

May graduates participating in commencement are given their diplomas at that time. All others should receive diplomas in the mail within a month of graduation. If a student files the ACG form late, he/she will receive the diploma late, approximately 6 weeks after graduation. Any questions about diplomas should be addressed to the Registrar's Office at 214/768-2048.

We hope that this information is helpful and realize that you may still have questions. Feel free to contact your graduate office at any time during the process. And at the successful completion of your degree, we want to add our sincere CONGRATUATIONS.

APPENDIX

THE TITLE IS IN ALL CAPS, NO MORE THAN 48 CHARACTERS SPACES TO A LINE, CENTERED BETWEEN MARGINS, DOUBLE SPACED ARRANGED IN AN INVERTED PYRAMID SHAPE

Approved by:
Single space name & title below line
List in order of Advisor, others alpha order
by last name
Allow adequate space for signatures

THE TITLE IS IN ALL CAPS, NO MORE THAN 48 CHARACTERS SPACES TO A LINE, CENTERED BETWEEN MARGINS, DOUBLE SPACED ARRANGED IN AN INVERTED PYRAMID SHAPE

(Allow 2 double spaces between)

A Dissertation (or Thesis) Presented to the Graduate Faculty of

(Your School)

Southern Methodist University

in

Partial Fulfillment of the Requirements

for the degree of

Doctor of Philosophy (or Master of Arts or Master of Science)

with a

Major in (your department)

by

(Allow 2 double spaces)

Your Name

(B.A., B.S., previous degree(s), institution, each on a separate line, single space this section)

(Allow 2 double spaces)

Official date degree will be conferred

Copyright (year)

Your Name

All Rights Reserved

(If you include this page, do not use page number but it will be counted as one of the preliminary pages when you do begin numbering)

Last name, First name

B.A., or B.S., Institution, year M.A, or M.S., Institution, year

(1 double space)

Title, Underlined, Left Justifiied, Headline-Style Capitalization

With the Same Separation (Structure) as on the

Half and Title Pages

Advisor: Professor John Doe

Doctor of Philosophy (Master of Arts, etc) conferred Month, Day, Year (from Official Calendar)

Dissertation (or Thesis) completed Month, Day, Year (real date you finished writing)

(allow 2 double spaces)

Abstract will be a short summary or overview of the thesis. Length can vary; 1-2 pages is a desirable length. Suggest you avoid using direct wording from other parts of the paper

This page is numbered with lower case Roman numerals.

(Allow 1.1" top margin) TABLE OF CONTENTS (Allow 2 Double Spaces) LIST OF TABLES (List only what comes after the Table of Contents) **p**.# LIST OF FIGURES (Dot leaders are an option) Chapter I. INTRODUCTION (Center Chapter number under the word "Chapter", Titles are all caps) II. METHODOLOGY (Right justify all numbers) Subjects (subheadings are indented 3 character spaces in from chapter titles) Procedure (All entries are double spaced; single entries are single spaced) Instruments Analysis III. RESULTS Supplemental Analysis IV. DISCUSSION APPENDIX (lines up with "Chapter, as it is a separate part of the thesis) A.

B.

C.

REFERENCES (or BIBLIOGRAPHY)

LIST OF TABLES

(Allow 2 Double Spaces)

Table		Page
1.	Demographic Frequencies (dot leaders are an option; if used, use for all tables)	XX
2.	Titles that need to be wrapped around (or run-over lines) Need to be indented 3 character spaces from the beginning of The title and single spaced	xx
3.	Right justify all numbers, double space between entries.	
4.	Second and succeeding pages of table listings will have a 1" top margin.	

(2" top margin)

ACKNOWLEDGEMENTS

(Allow 2 double spaces)

This page is usually included but is not required. If included, it goes here ONLY IF YOU ALSO HAVE A DEDICATION PAGE. If you do not have a dedication page, the acknowledgement page comes directly before the text--as the last preliminary page.

Whether it is the Acknowledgement page or the Abstract page (see next exhibit), this is the first page to be numbered with lower case Roman numerals. Count the half page, title page, and copyright (if included) and this first numbered page will be either iii or iv. Page numbers need to be 1" from bottom, centered under the text.

Chapter 1 (1 double space) TITLE IN ALL CAPS

(2 double spaces)

(If subheading title, place here and allow 1 double space or)

Begin text immediately after spacing. Double space all text. **Preferences**: 5 character space indents for paragraphs, 2 character spaces between periods and new sentences, no extra spacing between paragraphs. Publishing companies have changed some of these standards. The general guiding principle is consistency and logic.

Begin using Arabic numbers with this page (1" bottom, centered under text.) All succeeding pages will be numbered consecutively to the end of the manuscript.

If integrating figures or tables in text, allow 2 double spaces **before and after** any figure/table. Avoid leaving single lines at bottom or top of pages. Create a page break that leaves the extra space at the bottom of the page, allowing you to move single lines to top of next page. Rule of thumb is to use **bold** as seldom as possible on subheadings, etc.

BIBLIOGRAPHY or REFERENCES

(1 double space)

Follow a style that is consistent with your discipline. Use either a journal or textbook for the format style. Check with your advisor on the preferred style.