

Thesis Manual

A handbook containing requirements for format and arrangement

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THESIS FORMAT CHECKLIST

Master's and doctoral candidates: This checklist is to be used in conjunction with Drexel's *Thesis Manual*. The page numbers in parentheses refer to specific parts of the manual. Please make sure you have checked off all items on this list before you submit your thesis or dissertation to the library.

ARRANGEMENT (p. 10)

- Thesis/dissertation follows the arrangement specified on page 10 of the *Thesis Manual*.

MARGINS (p. 8)

- Left margin is at least 1½ inches wide on every page, including those with tables and figures.
- Right, top, and bottom margins are at least 1 inch wide on every page, including those with tables and figures.

PAGINATION (p. 8)

- Page numbers are in upper right-hand corner of page, at least ¾ inch from top.
- Preliminary pages (Dedications through Abstract) are numbered using lower-case roman numerals (e.g., ii, iii).
- Main text (Chapter 1 through end of thesis or dissertation) is numbered consecutively using Arabic numerals (e.g., 1,2,3).

TITLE PAGE (pp. 10, 17)

- Title page follows format shown on page 17 of *Thesis Manual*.
- For master's degree, subject is given:
Master of Science in _____.
- Month and year of defense are given.
- The page is counted as "i" but not numbered.

COPYRIGHT OR BLANK PAGE (pp. 1, 11)

- Copyright page follows the format shown on page 11 of the *Thesis Manual*.
- If thesis/dissertation is not copyrighted, a blank page has been inserted.
- The page is neither counted nor numbered.

DEDICATIONS (optional) (p. 11)

- The heading **Dedications** appears at the top of the page and is bold and centered.

ACKNOWLEDGMENTS (optional) (p. 11)

- The heading **Acknowledgments** appears at the top of the page and is bold and centered.

TABLE OF CONTENTS (pp. 11, 18)

- The heading **Table of Contents** appears at the top of the page and is bold and centered.
- The wording of the entries matches exactly the wording of the headings in the text.
- Titles are separated from page numbers with right-justified tabs and dot leaders (not periods).

LIST OF TABLES (pp. 12, 19)

- The heading **List of Tables** appears at the top of the page and is bold and centered.
- The wording of the entries matches exactly the wording of the table captions in the text.
- Table captions are separated from page numbers with right-justified tabs and dot leaders (not periods).

LIST OF FIGURES (pp. 12, 20)

- The heading **List of Figures** appears at the top of the page and is bold and centered.
- The wording of the entries matches exactly the wording of the figure captions in the text.
- Figure captions are separated from page numbers with right-justified tabs and dot leaders (not periods).

ABSTRACT (pp. 12, 21)

- Masters abstract is 600 words or less.
- PhD abstract is 350 words or less.
- Abstract follows the format on page 21 of *Thesis Manual*.
- The heading material is single-spaced.
- The abstract text begins four single-spaced lines below heading.
- The text is double-spaced.

BLANK PAGE (p. 13)

- A blank page (not counted or numbered) has been inserted after the abstract.

TEXT (p. 13)

- Font size is between 9 and 12 points, including chapter titles.
- General text is double-spaced.
- Thesis/dissertation is printed single-sided.

HEADINGS IN TEXT (p. 13)

- Chapter headings appear at the top of the page and are bold and centered.
- In chapter headings, chapter title directly follows chapter number, separated by either a period or a colon and one space.
- A consistent style (either all capital letters, title case, or sentence case*) has been followed for each of the different levels of heading.
- Headings are single spaced

TABLES (p. 8)

- Table captions are directly above the tables, immediately follow the table number, and are single spaced.
- Table captions have followed a consistent style (either title case or sentence case*).
- There are three single-spaced lines of space above and below each table (above the caption).

FIGURES (p. 8)

- Figure captions are beneath the figures, directly follow the figure number, and are single spaced.
- Figure captions have followed a consistent style (either title case or sentence case*).
- There are three single-spaced lines of space above and below each figure (below the caption).

FOOTNOTES (optional) (p. 13)

- Footnotes are separated from text with a line.
- There is one single-spaced line of space between line and first footnote.
- Each footnote entry is single-spaced.

LIST OF REFERENCES (pp. 13, 22)

- Heading is bold and centered.
- There are four single-spaced lines of space below the heading.
- Each entry is single-spaced.
- Double spacing is used between entries.
- Individual entries are not split over two pages.

APPENDICES (p. 14)

- The heading (e.g., Appendix A) and the title are on the same line, separated by a colon or period.
- Heading is bold and centered.
- The appendix material begins four single-spaced lines below the heading.

VITA (PhD only) (p. 14)

- Fits on one page.
- Includes all information specified on page 14 of the *Thesis Manual*.

BLANK PAGE (p. 14)

- A blank page (not counted nor numbered) has been inserted at the end of the dissertation/thesis.

* This Sentence is in Title Case.
This sentence is in sentence case.

Introduction

This manual explains the format and arrangement requirements for your thesis or dissertation as established by the Office of Research and Graduate Studies and the W. W. Hagerty Library at Drexel University.

Because Drexel Thesis Format procedures change from year to year, be sure you use the most recent version of the Thesis Manual to format your thesis/dissertation. Do not use previously submitted theses or dissertations as formatting guidelines

1. General Information

The first part of General Information explains the difference between a Masters and a Doctoral Thesis (or Dissertation) and then covers miscellaneous issues that may arise as you write your thesis.

1.1. Thesis Types

Doctoral Thesis

The Doctoral Thesis, or Dissertation, is an extended written treatise that represents original results and interpretations of a unique investigation by the degree candidate. It is required as partial fulfillment for an advanced degree at Drexel University.

Masters Thesis

The Masters Thesis must report independent work but need not include original research by the candidate. Not all departments at Drexel University require a thesis as partial fulfillment for a masters degree. Check with your graduate department for further information.

All thesis/dissertations submitted in partial fulfillment for an advanced degree become the permanent property of Drexel University.

1.2. Special Thesis/Dissertation Issues

Copyright

Competent legal opinion dictates that depositing a dissertation or a thesis in the library almost certainly constitutes publication. Students own copyright to their research regardless of whether they (a) choose to include a copyright page in the bound copies of their thesis or (b) register with the Copyright Office (either with or without the help of Bell and Howell). Drexel University assumes no responsibility for copyrighting thesis material.

Doctoral Thesis: To copyright a doctoral dissertation, fill out the middle section on the back of the Bell and Howell (University Microfilms, Inc.) Agreement Form. You must include a cashier's check, money order or certified check (cost includes fees for microfilming and binding) when you deliver the final copies of your dissertation to Hagerty Library.

Should you wish to use Bell and Howell's copyright registration service, you must select this option when you send your paperwork to them. Bell and Howell cannot register copyright for you after they have received and processed your dissertation.

Masters Thesis: To copyright a masters thesis, obtain a government copyright application form in Room 112 Hagerty Library.

Plagiarism

If you include copyrighted material in your thesis/dissertation manuscript, you are responsible for obtaining written permission from the owner. Drexel University takes no responsibility for damages that may arise from copyright violations by a degree candidate.

Confidential or Secret Theses

As a general rule, it is inappropriate for thesis research to be undertaken on topics that are classified confidential or secret for reasons of national security, or which involve restricted or proprietary information. No thesis covering such topics may be presented without appropriate clearances or releases; these items are the responsibility of the candidate.

Multiple-Volume Theses

If your original printed thesis/dissertation exceeds a thickness of 1 7/8 inches, the thesis must be bound in more than one volume. The second volume should contain a title page that duplicates the title page of the first volume. Also, individual identification such as “Volume 1” and “Volume 2,” or some descriptive word such as “Appendices” must be included on both title pages. All pages in additional volumes must continue the numbering from Volume 1 with the second title page not counted or numbered.

Style

You can use any professionally recognized style appropriate to your field of study. We recommend consulting a style manual in your field or one of the style manuals listed below.

- The Chicago manual of style. Chicago: University of Chicago Press, 1993. Hagerty call number Z253.U69 1993
- Publication Manual of the American Psychological Association, Fourth Edition. 1994.
- Turabian, Kate L. Student’s guide for writing college papers/Kate L. Turabian. Chicago: University of Chicago Press, 1976. Hagerty call number LB2369.T82 1976

1.3. Thesis Approval Process

This portion of the General Information section explains the process for Thesis approval process.

Individual academic departments may have additional requirements or may provide more details not included in this manual. Check with your department head or graduate advisor to find out if you need to follow any special requirements.

1. After you defend, make all content changes as required by your defense committee.
2. Obtain all required committee signatures on the Thesis Approval Form.
3. Format your thesis according to the guidelines set forth in this manual
4. Submit your final formatted thesis to your supervising professor for approval. The supervising professor will acknowledge approval by signing the Completion form. The department head will also acknowledge approval by signing the Completion form.

5. Take all forms and all required copies of your thesis/dissertation to Hagerty Library. You must submit a total of three or four copies of your thesis/dissertation to Hagerty. One copy must be on 100% cotton 20–24 lb. bond paper. The other two copies can be on regular copy paper. The fourth copy, which is required for Ph.D. candidates only, is an electronic version. (See section 1.5 for further information.)

1.4. Approval Form Requirements

All candidates must fill out two basic forms for Thesis Format Approval: the Thesis Approval Form (Form T-1) and the Completion Form. Doctoral candidates must also fill out the Bell and Howell (UMI) Dissertation Agreement Form.

Thesis Approval Form (Form T-1)

Hagerty Library binds one copy of this form with each print copy of your thesis/dissertation.

1. Print or type the title of your thesis/dissertation and your full name on the form.
2. Obtain the appropriate signatures as listed on the form. Every committee member must have an original signature on the Thesis Approval form.
3. Place the original form in the original copy of your thesis.

This form is available at <http://www.drexel.edu/provost/graduatestudies/>

Completion Form

1. Print or type your personal information and the title of your thesis/dissertation on the form.
2. Obtain the signatures of your supervising professor and graduate advisor as listed on the form.
3. Bring the form to the Library with the final copies of your thesis. The Library Thesis Reviewer will sign the form. For Ph.D. students who need to obtain the University Archivist's signature, someone in Technical Services is authorized to sign on the archivist's behalf.
4. Take the signed Completion Form to the Office of Research and Graduate Studies (3201 Arch St, Suite 100) for final degree clearance.

This form is available at <http://www.research.drexel.edu/graduate/forms/index.asp>

Bell and Howell (UMI) Agreement Form (Ph.D. candidates only)

Before submitting your final dissertation, complete fully the Bell and Howell (formerly UMI) agreement form. The form allows for the publication of the manuscript and specifies the conditions of the agreement. You must include a **cashier's check, money order, or certified check** made payable to "Bell and Howell." For more information, visit www.umi.com.

1.5. Library Submission Information

Print Version

For thesis format approval, follow carefully the guidelines discussed in Sections 3.1. through 3.16. All copies must be:

- Clean
- Error-Free
- Typed/printed only on one side of the page (not double-sided)
- Properly Collated
- Unbound

Use a word processor or desktop publishing system to produce a uniform style. Also, even if you use a grammar, punctuation, or spell checker program, please take the time to proofread your dissertation or thesis carefully. After all, these electronic tools will not catch every error.

Offset, letterpress, or laser printing is acceptable but the pages must conform to good printing standards throughout. The paper size must be 8 1/2" x 11". Mimeographed or similarly produced copies are not acceptable. Any work prepared by offset should be typed on a word processing or desktop publishing system that meets typescript standards.

Binding

Hagerty Library sends your thesis/dissertation for binding after you submit the printed copies.

The binding process takes 4–6 weeks. After binding, the Library files the original and one photocopy of your thesis/dissertation in its archives. The Library delivers the other copy to your supervising professor. For more information, see

<http://www.library.drexel.edu/services/thesisbinding.html>

You will not get any of these bound copies back. If you want any bound copies for yourself, you must submit extra copies to Hagerty and pay an extra binding fee.

Microfilming (Doctoral Dissertations only)

Before binding, Hagerty Library sends the 100% cotton copy of all doctoral dissertations to Bell and Howell (formerly UMI) for microfilming. Bell and Howell maintains a negative copy of the film. It will be maintained in their files at University Microfilms so interested scholars can purchase microfilm copies or photocopies at any time.

Electronic Version

The University requires electronic submission of all dissertations. The electronic version of your thesis or dissertation must comply with all the requirements for printed theses or dissertations as explained in the Thesis Manual.

The document should be in Adobe Portable Document Format (PDF) format. No compression or password protection should be employed.

The appearance of your dissertation or thesis online is your responsibility. Be sure to examine the PDF version of your thesis or dissertation and check it for completeness and fidelity to the print version.

You may include internal or external hyperlinks in the PDF version of your thesis or dissertation. If you are linking to a specific file (as opposed to a World Wide Web site) then you must include that file(s) when you submit the electronic copy of your thesis or dissertation.

Only files in the following formats will be accepted:

Images: GIF (.gif), JPEG (.jpeg), and TIFF (.tif)

Video: Apple Quick Time (.mov), Microsoft Audio Video Interleaved (.avi), and MPEG (.mpg)

Audio: MIDI (.midi), SND (.snd), and WAV (.wav)

Other: HTML (.html) and Microsoft Word (.doc)

The Library intends to make your research as widely available to the international scholarly community as possible. If you are at all uncomfortable with the idea of having your research freely available on the Internet, you may select not to have the electronic version of your dissertation made available through the Library's Electronic Theses and Dissertations program.

The electronic version of your thesis or dissertation on CD must be submitted to the library along with the printed copies for binding.

To opt out of the Electronic Theses and Dissertations program, a student must present the University Archivist with a note from his or her advisor indicating that he/she has discussed the issue of electronic availability with the advisor. For more information about this option, please consult the Electronic Theses and Dissertations website at <http://dspace.library.drexel.edu/handle/1860/10> or send e-mail to the University Archivist at archives@drexel.edu.

Final Degree Clearance

After you submit all materials to Hagerty Library and obtain the required signatures on the Completion Form, take the signed form to the Graduate Studies Office (3201 Arch Street, Suite 100) for final degree clearance.

1.6. Graduating in Absentia

If you are living and/or working out of town while you are completing your thesis/dissertation, please arrange to have someone on campus obtain the required signatures on your Completion Form and submit your materials to the library and Office of Graduate Studies if you cannot do so in person.

1.7. Submission Deadlines

You must submit the signed Completion Form to the Office of Research and Graduate Studies (3201 Arch St, Suite 100) no later than the third day of final exam week in the term you intend to graduate. For specific deadline dates visit the Graduate Studies website at:

<http://www.drexel.edu/provost/graduatestudies/>

2. Thesis Format and Appearance

Methods of Production

All theses and dissertations must be typed using word processing or page layout software. No other production methods are acceptable.

2.1. Typed or Computer-Generated Originals

- One copy must be on quality white opaque paper, 20–24 lb. bond, 100% cotton, 8 1/2" x 11" sheets. The watermark will say "100% cotton copy." This paper may be purchased at any stationery or office supply store.
- Other printed copies, including drafts submitted to the Thesis Format Reviewer, may be on any good quality white paper and may be photocopied.

2.2. Computer Print-Outs (Non-Standard Paper Size)

- Photocopy non-standard printouts on 100% cotton bond for the final version.
- Include captions on the photocopied pages.
- If possible, reduce oversized printouts to 8 1/2" x 11" size.

2.3. General Formatting Guidelines

This section describes general formatting rules for all theses/dissertations. For specific formatting and arrangement rules for each part of the thesis, please refer to Section 3, Thesis Arrangement.

Type

- Font size must range from 9 to 12 points, including chapter titles.
- Print must be legible and readable.
- No specific font is required; however, traditional serif fonts such as Times or Palatino are encouraged. Fonts must be consistent throughout the document (e.g., if captions are 10-point Times in chapter 1, they must be 10-point Times in all other chapters).
- Where hand work is required, use black India ink. Characters not available in type should be lettered using lettering guides where possible.

Margins

- The left margin must be at least 1 1/2" (1.5 inches) throughout the document.
- All other margins (top, bottom, and right) must be at least 1".
- Headings and subheadings must have at least two full lines of body text below them. If only one line of text fits below a heading, move the heading to the next page.

Pagination

- Number all pages consecutively.
- Place page numbers in the upper right-hand corner of the page, 3/4" from the top.
- Use lowercase Roman numerals for preliminary pages.
- Use Arabic numbers for the text, references, appendices, bibliography, and all other pages including photographs, illustrations, and drawings.

Note: Begin these numbers on the first page of the text and continue in consecutive order until the end of the dissertation or thesis.

- Page numbers on landscaped pages should be in portrait orientation.
- Do not use a period after the page number.
- Do not number the title page even though it is counted as "i."
- Do not insert lettered page numbers such as 10a, 10b, 10c, etc.

Spacing

- Double space general text material.
- Insert at least 3 single-spaced lines of space above table captions and figures and below figures captions, tables, and other graphics.
- Single space footnotes and long quotations.
- Single space bibliographic entries, **but** double space **between** each bibliographic entry.

Footnotes

- Separate footnotes from the text with a line, and leave one single-spaced line of space between the line and the footnote.

Tables and Figures

- For both tables and figures, use a word processor or black india ink and a lettering guide for captions, numerals, symbols and characters.
- If you use external tables or figures, prepare all tables and figures (including graphs) on 100% cotton bond or 100% cotton tracing paper. Acceptable tracing paper examples are: clear print #16 stock, Post 175H vellum, or Albanene 105351 100% rag. Alternative processes include duplication by photocopy on 100% bond or for photographs, lightweight photographic paper.
- Color may be used.
- If graphs include a detailed grid, you may need to prepare an original on 100% bond by duplication using a photocopier. Green lines duplicate best for all processes.

- Document margin limitations apply to tables and figures. Tables and figures **cannot** extend into any of the margins.
- Insert at least 3 single-spaced lines of space above table captions and figures and below figure captions, tables, and other graphics.
- Place figure captions below figures. Place table captions above tables.
- If a figure or a table continues onto a subsequent page(s), include the following caption: Table x (*continued*) or Figure x (*continued*).
- Landscaped figures and tables should have landscaped captions. Page numbers should be in portrait orientation.
- Tables and figures can be grouped in a separate chapter in the text or as an appendix.

Illustrative Materials

- Make sure all illustrative materials conform to permanent record standards and are as close as possible to the same size and margins as the text.
- If you must use larger illustrative material, fold it with a minimum number of folds so that it falls within the margins of a normal text page (8 1/2" x 11").

Note: Since binding of a thesis requires edge trimming, illustrative material too close to the sewing or trimming edges will be defaced during the binding process. Also, large illustrative material may be impossible to microfilm.

- If a diagram, photograph, or similar material is smaller than thesis page size (8 1/2" x 11"), mount it with a high-quality permanent adhesive. Do not use glue, mounting tape or rubber cement. Instead, use permanent archival adhesive such as dry mounting tissue, library paste or spray-on adhesive.
- Where possible, print photographs on 8 1/2" x 11" single weight photographic paper. Include and number the sheets as a part of the text.
- Use India ink to add labels and captions on photographs.

3. Thesis Arrangement

This section describes how you should arrange the parts of your thesis. You must include each item in the list below in your thesis (unless it is noted “optional”). The parts must appear **in the exact order** described in the list below.

Quick Guide to Arranging Your Thesis

1. Title page
2. Copyright page
3. Dedications (**optional**)
4. Acknowledgments (**optional**)
5. Table of Contents
6. List of Tables
7. List of Figures
8. Abstract
9. Blank page
10. Text
11. Bibliography (or List of References)
12. Appendices
13. Vita (**Ph.D. only**)
14. Blank page

3.1. Title Page

- The title page should look exactly like the sample on page 17.
- Use your full name, including your middle initial or name.
- Write out the name of the degree for which you are a candidate. All Ph.D. candidates must use Doctor of Philosophy. All Masters Degree candidates should use the precise degree name (e.g., Master of Science in Mechanical Engineering).
- Use the month and year in which you defend your thesis or dissertation.
- This page is counted but not numbered (it counts as page i but should not have a page number).

3.2. Copyright Page

- Include a copyright page with the following information: a copyright notice, full legal name of author, and date of publication on file. Center the information on the page as shown:

© Copyright 2005
Jane S. Jones. All Rights Reserved.

- For more information regarding copyright issues, visit www.loc.gov/copyright/forms/formtxi.pdf.

- This page is neither counted nor numbered. If you chose not to add a copyright page, a blank page should be substituted.

3.3. Dedications

- The Dedications page is optional.
- The heading **Dedications** must appear at the top of the page. The heading must be bold, centered, and without punctuation.
- This page is counted and numbered in lowercase Roman numerals.

3.4. Acknowledgments

- The Acknowledgments page is optional, but most theses do include a brief statement of thanks or recognition of any special assistance.
- The heading **Acknowledgments** must appear at the top of the page. The heading must be bold, centered, and without punctuation.
- This page is counted and numbered in lowercase Roman numerals.

3.5. Table of Contents

- The Table of Contents should follow closely the sample on page 18.
- The heading **Table of Contents** must appear at the top of the first page. The heading must be bold, centered, and without punctuation.
- Do not list any sections that precede the Table of Contents (e.g., Dedications, Acknowledgments). Do not list the Table of Contents itself.
- List chapter titles and at least the first or second order subdivisions. Make sure that chapter and section titles are worded exactly as they appear in the body of the thesis.
- Single space each entry, but double space between entries.
- Separate titles from page numbers with right-justified tabs and dot leaders. **Do not use periods to separate titles and page numbers.**
- These pages are counted and numbered in lowercase Roman numerals.

3.6. List of Tables

- The List of Tables should follow closely the sample on page 19.
- The heading **List of Tables** must appear at the top of the first page. The heading must be bold, centered, and without punctuation.
- List table captions exactly as they appear **above** the tables in the text. Single-space each entry, but double-space between entries.
- Separate table captions from page numbers with right-justified tabs and dot leaders. Do not use periods to separate captions and page numbers.
- These pages are counted and numbered in lowercase Roman numerals.

3.7. List of Figures

- The List of Figures should follow closely the sample on page 20.
- The heading **List of Figures** must appear at the top of the first page. The heading must be bold, centered, and without punctuation.
- List figure captions exactly as they appear **below** the figures in the text. Single-space each entry, but double-space between entries.
- Separate figure captions from page numbers with right-justified tabs and dot leaders. Do not use periods to separate captions and page numbers.
- These pages are counted and numbered in lowercase Roman numerals.

3.8. Abstract

- The Abstract should follow closely the sample on page 21.
- The abstract is a summary that allows readers to determine the value of reading the full thesis. It should include a statement of the problem, an outline of procedures or methods, and a summary of results and conclusions.
- Masters thesis abstracts must be 600 words or less.
- Ph.D. dissertation abstracts must be 350 words or less because of Bell and Howell microfilming limitations.
- The following heading must be centered at the top of the first page:

Abstract
Full Title of Dissertation or Thesis
Author's Name as it appears on the Dissertation or Thesis
Supervisor's Name

- The text begins four lines below this heading.
- The text must be double spaced. (Note that the heading lines are single spaced.)
- The pages are counted and numbered in lowercase Roman numerals.

3.9. Blank Page

- Include a blank page (with no page number) before the first page of the text.
- The blank page is neither numbered nor counted.

3.10. Text

- Divide the text into its major parts/chapters/subsections. No fixed arrangement is necessary. The major parts may contain such subjects as introduction, general argument, description of experimental procedures, research methods, discussion, summary, conclusions, recommendations, and other pertinent topics that are necessary for a complete understanding on the part of a sophisticated or professional reader.
- The chapter and section titles should be the same as the headings listed in the Table of Contents.

Note: If your thesis or dissertation includes a list of nomenclature and symbols, include the list as an appendix.

- The pages are counted and numbered in Arabic numerals.

3.11. Headings in Text

- Chapter headings must be bold and centered.
- The chapter number and title must be on the same line, separated by a colon or period, as shown in the example below:

CHAPTER 1: INTRODUCTION

- Headings must not be larger than 12 points.
- Headings must be single spaced.

3.12. Footnotes (optional)

- Each footnote cites an authority for statements in the text.
- Number each footnote chronologically in Arabic numerals.
- Place each footnote on the same page on which it appears in the text.
- Separate footnotes from the text with a line. Leave one single-spaced line of space between the line and the first footnote.
- Single space each footnote entry.

3.13. Bibliography (or List of References)

- The Bibliography (or List of References) should follow closely the sample on page 22.
- The heading **Bibliography** (or **List of References**) must appear at the top of the first page. The heading must be bold, centered, and without punctuation.
- Begin the list of sources four spaces below the heading.
- Single space within each entry, and double space between entries.
- Do not split entries over two pages. If an entire entry does not fit on one page, place the entire entry on the next page.
- Entries may be in any consistent arrangement (e.g., alphabetical by author, numerical, or chronological) as specified by professional journals standard in your discipline.
- These pages are counted and numbered in Arabic numerals.

3.14. Appendices

- If supplementary original data, illustrative material, a detailed derivation of equations, an extensive proof of a theorem, or a quotation too extensive for the body of the thesis are included, they may be presented in appendices. Similar material should be gathered in a single appendix.

Note: If your thesis/dissertation includes a list of nomenclature and symbols, include the list as an appendix.

- Number the appendices consecutively either alphabetically or numerically (**Appendix A, Appendix B...** or **Appendix 1, Appendix 2...**).
- The heading **Appendix A** (or **B, C, 1, 2**) and the title of the material must be bold, centered, and without punctuation.
- The appendix material should begin four spaces below the heading.
- List each appendix and its title separately in the Table of Contents.
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3.15. Vita (Ph.D. only)

- The Vita is a biography of the student written in the third person in either essay or outline form. It should include full name, place and date of birth (optional), country of citizenship (optional), institutions attended, degrees and honors received, titles of publications, teaching and professional experience, and other pertinent data.
- The Vita must be one page or less.
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3.16. Blank Page

- Include a blank page (with no page number) at the end of the thesis or dissertation.
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Sample C—Title Page Format

Center vertically and horizontally (remember to adhere to the 1 1/2" left margin).

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should be bold

**Coenzyme Fluorescence Responses of Yeast and Hybridoma
Cultures to Induced Metabolic Transitions**

A Thesis

Submitted to the Faculty

of

Drexel University

by

Steven Anthony Siano

in partial fulfillment of the

requirements for the degree

of

Doctor of Philosophy

June 2005

Sample D - Table of Contents

These pages are numbered using lowercase Roman numerals.

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Sample H—List of References**List of References**

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1. Jennette JC, Falk RJ. Small-vessel vasculitis. *N Engl J Med* 1997;337:1512–23.
2. Jennette JC, Falk RJ, Andrassy K, et al. Nomenclature of systemic vasculitides: proposal of an international consensus conference. *Arthritis Rheum* 1994;37:187–92.
3. Guillevin L, Druand Gasselín D, Cevallos R, et al. Microscopic polyangiitis: clinical and laboratory findings in eighty-five patients. *Arthritis Rheum* 1999;42:421–30.
4. Falk RJ, Jennette JC. Anti-neutrophil cytoplasmic autoantibodies with specificity for myeloperoxidase in patients with systemic vasculitis and idiopathic necrotizing and crescentic glomerulonephritis. *N Engl J Med* 1988;318:1651–57.
5. Guillevin L, Lhote F. Treatment of polyarteritis nodosa and microscopic polyangiitis. *Arthritis Rheum* 1998;41:2100–5.
6. Haubitz M, Schellong U, Göbel HJ, et al. Intravenous pulse administration of cyclophosphamide versus daily oral treatment in patients with antineutrophil cytoplasmic antibody-associated vasculitis and renal involvement: a prospective, randomized study. *Arthritis Rheum* 1998;41:1835–44.
7. Falk RJ, Hogan S, Carey TS, Jennette JC. Clinical course of anti-neutrophil cytoplasmic autoantibody-associated glomerulonephritis and systemic vasculitis: the Glomerular Disease Collaborative Network. *Ann Intern Med* 1990;113:656–63.
8. Hoffman GS, Leavitt RY, Fleisher TA, et al. Treatment of Wegener’s granulomatosis with intermittent high-dose intravenous cyclophosphamide. *Am J Med* 1990;89:403–10.
9. Westman KWA, Bygren PG, Olsson H, et al. Relapse rate, renal survival, and cancer morbidity in patients with Wegener’s granulomatosis or microscopic polyangiitis with renal involvement. *J Am Soc Nephrol* 1998;9:842–52.
10. Nowack R, Göbel U, Klooker P, et al. Mycophenolate mofetil for maintenance therapy of Wegener’s granulomatosis and microscopic polyangiitis: a pilot study in 11 patients with renal involvement. *J Am Soc Nephrol* 1999;10:1965–71.
11. Haubitz M, Koch KM, Brunkhorst R. Cyclosporin for the prevention of disease reactivation in relapsing ANCA-associated vasculitis. *Nephrol Dial Transplant* 1998;13:2074–6.
12. Allison AC, Eugui EM. Immunosuppressive and other effects of mycophenolic acid and an ester prodrug, mycophenolate mofetil. *Immunol Rev* 1993;136:5–28.