A THESIS/DISSERTATION FORMATTING MANUAL FOR THE PURDUE UNIVERSITY CHEMISTRY DEPARTMENT

A Manual

Submitted to the Faculty and Graduate Students of Purdue University

by

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To help fulfill the Requirements for the Degrees of Doctor of Philosophy and Master of Science

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West Lafayette, Indiana
I dedicate this training manual to all of the future Purdue University Chemistry graduate students. May all of your dreams be fulfilled and your formatting experience be smooth.
ACKNOWLEDGMENTS

To all of the past graduate students and thesis format advisors that made it clear that the future students in the Chemistry Department deserved their own manual with clearly explained guidelines. Thank you for all of your help and guidance.
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CHAPTER 1 MARGINS, FONT, LINE SPACING AND PAGE NUMBERS

1.1 Margins

The left margin should measure 1.5 inches. This margin is the most important since this is the side that will be bound. The right margin should measure 1 inch, and the bottom margin should measure 1.25 inches. The top margin will either measure 1 inch or 2 inches depending on the situation. If you start a page with a chapter title or a heading that is supposed to be written in all upper case letters then the margin should be set at 2 inches. If you start the page with a subheading that is written in upper and lower case letters or your text, then the page will start at the 1 inch margin. For more information on headings see chapter 4, pg 14.

1.1.1 Note About Margins

After setting your margins, you should print a page of text and measure the margins with a ruler to make sure they are correct. Some printers will not hold the margin when printing. You may have to “tweak” the margin setting in the document so that the printer will print using the correct margins. Once you have the margins set so that they are correct after printing, it is recommended that you do not use a different printer since each printer prints differently.
1.2 Line Spacing

Vertical spacing, or line spacing, of all text, including bibliographic references, should be 1.5 (four lines per vertical inch) or double-space (three lines per vertical inch). Long quotations, headings, and captions should be single-spaced (six lines per vertical inch). Multi-lined subdivision headings, figure, table, and scheme captions, footnotes, and endnotes should all be single-spaced as well.

1.3 Font Size and Style

Only one font style may be used throughout the thesis. Please refrain from using ‘creative’ font styles. All text, page numbers, table numbers, figure numbers, captions, references, and footnotes must be in the same style. Your font size should neither be less than 10 points and no more than 12 points.

1.4 Rules for Using Bold and Italics

Well-crafted text usually does not require typeface variations for emphasis. Avoid underlining, bolding, or italicizing text purely for emphasis only. However, the use of bold or italics with a scientific reason is acceptable.

1.5 Widows and Orphans

Avoid ending pages with one-line paragraphs or with only the first line of text of a paragraph continuing on the following page (these are commonly called “orphans”). Paragraphs ending pages of text must contain at least two lines of text or be moved to the top of the following page. This rule also applies to “hanging” subdivision headings which
are subdivision headings without at least two lines of text immediately following the heading on the same page.

New pages of text must not begin with the last line of paragraphs carried over from previous pages (these are commonly called “widows”). Instead, set Microsoft Word’s Widow/Orphan Control so that the program will automatically take care of this for you.

1.6 Page Numbers

Page numbers should be placed in the upper right corner, ½ inch below the top edge of the page. The last digit of the page number should be even with the right margin. Page numbers must be in the same font and font size as your text.

Except for the title page and cover pages, page numbers must be placed on each page of the thesis. The word “page” never accompanies the number. Pages numbered with a suffix (e.g., 2b) are not permitted.

1.6.1 Page Numbers for the Preliminary Pages

Page numbers for the preliminary pages should be numbered consecutively in lower case roman numerals.

1.6.2 Page Numbers for the Rest of the Paper

Text and all reference pages, including appendices, are numbered consecutively in Arabic numerals beginning with 1 on the first page of text.
CHAPTER 2 PRELIMINARY PAGES

2.1 Page Numbers

Preliminary pages such as ACKNOWLEDGMENTS or TABLE OF CONTENTS are numbered consecutively in lowercase roman numerals and are located in the upper right hand corner at the .5” margin and to the left of the 1” right margin.

2.2 Cover Page

This page is required for all theses. The title page is counted as page “i” of the preliminary pages but is not numbered on the page. The information should be centered between the left and right margins, not the edges of the sheet. The title shown must be the full, official title of the thesis and should appear in all capital letters. Superscripts and subscripts are not permitted in the title. Your full name should appear as it does in Purdue University’s academic records. The degree title for all doctoral candidates is “Doctor of Philosophy” and for all master’s candidates in Chemistry is “Master of Science”.

2.3 Dedication

A dedication page is optional. It should be brief and centered between the left and right margins. Do not put ‘DEDICATION’ at the 2” top margin. If you choose to have a
dedication this page is numbered “ii”. The dedication is not listed in the TABLE OF CONTENTS.

2.4 Acknowledgments

An acknowledgments page is optional, but most theses include a brief statement of appreciation or recognition of special assistance. The heading ‘ACKNOWLEDGMENTS’, in capital letters, is centered between the left and right margins, without punctuation or underlining and is located at the two inch top margin.

Your text begins three blank lines (the same as hitting enter 2 times) below the heading. The vertical spacing of the text must be the same as the rest of the thesis (1.5 or double space). Number this page in lowercase roman numerals. The acknowledgments page is not listed in the TABLE OF CONTENTS.

2.5 Preface

A preface is optional. Check a style manual for material that is appropriate in the preface. The heading ‘PREFACE’, in capital letters, is centered between the left and right margins, without punctuation or underlining, and is located at the two inch top margin.

Your text begins three blank lines (the same as hitting enter 2 times) below the heading. The vertical spacing of the text must be the same as the rest of the thesis (1.5 or double space). Number this page in lowercase Roman numerals. The preface is not listed in the TABLE OF CONTENTS.
2.6 Table of Contents

A Table of Contents is required. The heading ‘TABLE OF CONTENTS’, in capital letters, is centered between the left and right margins, without punctuation or underlining, and is located at the 2 inch top margin.

The list begins at the left margin, three blank lines below the heading (the same as hitting enter 2 times). All material following the TABLE OF CONTENTS is listed in it. No preceding material is listed. The headings of parts, sections, chapters and their subdivisions are listed in the TABLE OF CONTENTS and must be worded exactly as they appear in the body of the thesis.

When listing subdivisions, list the same levels of headings and subheadings consistently for each chapter. Dotted leaders are required between headings and page numbers (see dot leader section on page 9 for more information). If the TABLE OF CONTENTS continues beyond one page, allow a one-inch top margin on the successive page or pages. The word “Page” should be typed above the page number column on each page. Number the TABLE OF CONTENTS pages in lowercase Roman numerals.

2.7 List of Tables

The LIST OF TABLES contains exactly the same numbers and captions as appear above the tables in the text and in the appendices.

The heading ‘LIST OF TABLES’, in all upper case letters, is centered between the left and right margins, without punctuation or underlining, two inches from the top of the page. Number the LIST OF TABLES page(s) with lowercase Roman numerals in the upper right hand corner of the page. The list begins at the left margin, three blank lines
below the heading. If the LIST OF TABLES continues beyond one page, begin the following page or pages at the one inch top margin. The format for the LIST OF TABLES is the same as for the TABLE OF CONTENTS.

Type the word ‘Table’ above the table number column and the word ‘Page’ above the page number column.

2.8 List of Figures

The heading ‘LIST OF FIGURES’, in capital letters, is centered between the left and right margins, without punctuation or underlining, two inches from the top of the page. Number the LIST OF FIGURES pages in lowercase Roman numerals. The list begins at the left margin, three blank lines below the heading. The LIST OF FIGURES contains exactly the same numbers and captions as appear below the figures in the text and in the appendices. If the LIST OF FIGURES continues beyond one page, begin each successive page or pages at the one inch top margin. The format for the LIST OF FIGURES is the same as for the TABLE OF CONTENTS.

Type the word ‘Figure’ above the figure number column and the word ‘Page’ above the page number column.

2.9 List of Schemes

The heading ‘LIST OF SCHEMES’, in capital letters, is centered between the left and right margins, without punctuation or underlining, two inches from the top of the page. Number the LIST OF SCHEMES page(s) in lowercase Roman numerals. The list begins at the left margin, three blank lines below the heading. The LIST OF SCHEMES
contains exactly the same numbers and captions as appear below the Schemes in the text and in the appendices. If the LIST OF SCHEMES continues beyond one page, allow a one-inch top margin on the successive page or pages. The format for the LIST OF SCHEMES is the same as for the TABLE OF CONTENTS.

Type the word ‘Scheme’ above the scheme number column and the word ‘Page’ above the page number column.

2.10 Lists of Symbols, Abbreviations, Nomenclature, or Glossary

Lists of symbols, abbreviations, nomenclature or a glossary may be appropriate for some theses. If needed, these lists appear after the LIST OF TABLES, LIST OF FIGURES, and LIST OF SCHEMES. Number these pages in lowercase Roman numerals. Follow a form that would be acceptable in your field of study. If the glossary is more than two pages, it may be placed at the back of the thesis between the notes and the LIST OF REFERENCES. The vertical spacing of your list(s) is the same as the rest of the thesis between entries and single spaced within each entry.

2.11 Dot leaders

Dot leaders are small dots that connect the text on the right side of the page (headings or captions) to the page numbers on the left. Do not create these by typing a series of periods. The dot leaders make a consistent and uniform set of dots whereas typing a series of periods does not. Below are the instructions for creating dot leaders in your TABLE OF CONTENTS, LIST OF TABLES, LIST OF FIGURES AND LIST OF SCHEMES.
2.11.1 How to create Dot Leaders

How to create Dot Leaders

Go to Tabs under the Format menu

Under Tab Stop Position

Type .25”. Then go to Alignment and choose Left and then ‘Set’.

Then go back to Tab Stop position. Type 5.9” (or so)

Then go to Alignment and choose Right

Then under Leader choose option #2 (dot leaders)

Click “Set”

Then click “Ok”

Your dot leaders are now set. After you type your headings, hit Tab, and the dots should appear. You can use your space bar to add spaces. For additional help with dot leaders see the Microsoft Word Help tips on the Chemistry Formatting website or the Graduates School website.

2.12 Abstract

An abstract consisting of two paragraphs is required for all theses. The abstract page is numbered using lower case roman numerals.

The first paragraph contains your name as it appears on the title page (but with the last name first followed by your first name and middle initial), the abbreviation of the degree title, the name of the institution granting the degree, the month and year the degree is awarded, the exact title of the thesis as it appears on your title page, and the
name of your major professor. This paragraph is always typed using single-spaced line spacing.

The second paragraph is a summary of your research. The spacing used in this paragraph must be the same as the spacing in the rest of the text (double spaced or 1.5). Mathematical formulas, diagrams, and other illustrative materials are not recommended for the abstract.
CHAPTER 3 FIGURES, TABLES, SCHEMES AND THEIR CAPTIONS

Tables are generally used to list tabulated numerical data, while figures are generally used to present nonverbal material (e.g., graphs or illustrations). Graphic materials may also be presented with photographic reproductions. Produce tables, figures, or photographs with an appropriate software program. Printing should be accomplished with either a laser printer or graphics plotter.

3.1 Using Color

Tables, figures, and photographs may be printed in color as long as they are printed on paper meeting format requirements. It is especially important to print items in color using a laser printer as laser printers will produce the best quality. You will want to make sure that your color does not bleed on to the rest of the paper.

3.2 Location

All figures, tables and schemes should be placed adjacent to the related text (i.e., usually either on the same page or the page immediately following) or at the end of each chapter. If you choose to put them at the end of each chapter they must come after the references.
3.3 Captioning and Numbering

Captions must be as concise as possible. Tables, figures, and schemes, including those in the appendices, are each assigned a unique Arabic number and a unique caption. Tables, figures, and schemes are numbered consecutively; one sequence for tables (e.g., Table 1.1; Table 1.2; etc.), a separate sequence for figures (e.g., Figure 1.1; Figure 1.2; etc.) and a separate sequence for schemes (e.g., Scheme 1.1; Scheme 1.2; etc.). Tables, figures, and schemes in the appendices are to be numbered A1, A2, A3, etc. The complete caption must be included in the LIST OF TABLES, LIST OF FIGURES, or LIST OF SCHEMES. Single-space line spacing is used for table, figure, and scheme captions.

In some cases, you may have computer programs or large amounts of data too voluminous to easily incorporate into your appendices. If so, you may attach a CD-Rom, placed into a plastic sleeve with an adhesive back, to the inside back cover of your thesis. Plastic CD-Rom sleeves are available at either campus bookstores or at local office supply outlets. Material contained on the CD-Rom should be referenced in your text as appropriate.

All tables and figures, including their captions, must conform to margin requirements. If facing pages are necessary, the right and left margins are reversed. If a table will not fit on one page and it is necessary to continue it to the next page, type the caption on the first page of the table. Place “Table X.X continued” above the continuing tables on the successive pages.
CHAPTER 4 INTRODUCTIONS, CHAPTER TITLES, SUBHEADINGS, AND REFERENCES VS LIST OF REFERENCES

4.1 Introduction

Introductions may precede the first chapter or major divisions of theses. In these cases, the heading INTRODUCTION, in capital letters, is centered without punctuation or underlining, two (2) inches from the top of the page. The text begins three single-space lines (2 enters) below the heading “INTRODUCTION”. The page number will appear as Arabic numeral 1 on the first page of text.

Introductions may also be first chapters of theses, in which case INTRODUCTION is the title of the first chapter or major division, and its placement is consistent with other chapter titles.

A third approach is for introductions to be opening statements of the first chapter and require no special treatment or heading.

If your thesis is divided into parts or sections, and if the introduction serves to introduce the entire work, it precedes the divider sheet for PART ONE. The title on the divider page is PART ONE, and is centered without punctuation or underlining on the page. Divider pages must be paginated and listed in your TABLE OF CONTENTS. If each part has its own introduction, any one of the first three ways described above can be used for each part. For more information on theses divided into parts or volumes see chapter 5 pages 21-22.
4.2 Chapter Titles

Chapter titles are considered major headings. A major heading is always placed in all capital letters, centered, 2” from the top edge of the page, and must have 3 single space blank lines between the major heading and any following text, figure, table, or scheme.

4.3 Sub-headings

There are 4 levels of sub-headings. 1st order sub-headings, 2nd order sub-headings, 3rd order sub-headings and 4th order sub-headings.

4.3.1 First-order Sub-heading

First-order sub-headings are centered and underlined. A mix of upper and lower case letters are used. If it begins a page, you must have a 1” top margin. If it follows text or a major heading, you must have 3 single space blank lines (2 enters) between them. If text immediately follows the first-order sub-heading it is separated by one single spaced line or 1 enter.

4.3.2 Second-order Sub-heading

Second-order sub-headings are centered and not underlined. A mix of upper and lower case letters are used. If a second-order sub-heading begins a page, it must start at the 1” top margin. If it follows text or a 1st order sub-heading, it must be separated by 3 single space blank lines (2 enters). If text immediately follows the second-order sub-heading it is separated by one single spaced line or 1 enter.
4.3.3 Third-order Sub-Heading

Third-order sub-headings are flush with the left margin and underlined. A mix of upper and lower case letters are used. If it begins a page, you must have a 1” top margin. If it follows text or a second-order sub-heading, there must be 3 single space blank lines (2 enters) between them. If text immediately follows the third-order sub-heading it is separated by one single spaced line or 1 enter.

4.3.4 Fourth-order Sub-heading

Fourth-order sub-headings are flush with the left margin and not underlined. A mix of upper and lower case letters are used. If it begins a page, it must start at the 1” top margin. If it follows text or a third-order sub-heading, they must be separated by 3 single space blank lines (2 enters). If text immediately follows the fourth-order sub-heading it is separated by one single spaced line or 1 enter.

4.4 References vs. List of References

You may call your references “References”, “List of References”, or “Bibliography”. The term “References” is used if they come at the end of each chapter. The term “List of References” and “Bibliography” should be used when you put them at the end of your thesis/dissertation. If you choose to put your references at the end of each chapter, you will then treat them as a first-order sub-heading. This means that your heading will look like such: X.X References, and will then be placed at the 1” margin. Your references will begin on the second line (1 enter) after your sub-heading, just like other first-order sub-headings throughout your paper.
If you choose to put your references at the end of your paper you will treat your references as a major heading and your heading will look like thus: LIST OF REFERENCES, and will be placed at the 2” margin (just like your chapter titles). You will then start your references on the fourth blank line (2 enters) below the heading ‘LIST OF REFERENCES’. If you choose to do your references in this way you will also need to include a cover page with ‘LIST OF REFERENCES’ centered on it and placed before your references. The cover page is not counted or numbered.

4.4.1 Spacing within Your References

Once you have decided where to put your references, you will need to decide on what format to use. This is where you have some freedom. The only requirement is that the reference be single spaced and that there is one blank line between each reference.
5.1 Vita

The VITA is only required for PhD candidates. A VITA is a 3rd person narrative of your personal academic career and future plans. You should avoid using graphics, photographs, figures, tables, etc.

‘VITA’ is placed at the 2 inch margin of the page in all upper case letters. Begin typing 3 blank lines (2 enters) from the heading VITA.

5.1.1 Cover Sheet

The VITA is preceded by a cover sheet that is neither numbered nor counted. The word VITA is placed in the center of the page in all upper case letters.

5.1.2 Location in the Paper

The VITA is the last major division of the dissertation unless it is followed by a publication. Page numbers should be typed using Arabic numerals and placed in the upper right hand corner of the page.
5.2 Publication(s)

A publication is required for PhD candidates only. You may include as many of your publications as you wish but you must include at least one.

5.2.1 Location and Page numbers

Incorporation of papers is handled in two ways: 1) the Publication(s) may be placed in your thesis immediately following the abstract. Page numbers are in lowercase Roman numerals (i, ii, iii, iv etc), continuing the sequence of the preliminary pages. Or 2) they may be placed after the VITA, in which case page numbers will be in Arabic (1, 2, 3, 4 etc) and is continued to the end of the article.

5.2.2 Publication Cover Sheet

The Publication is always preceded by a cover sheet with the heading PUBLICATION or, if more than one, PUBLICATIONS, in all capital letters, without punctuation or underlining, centered on the page. The cover sheet is neither numbered nor counted.

5.2.3 Listing in the Table of Contents

Articles are to be listed in the TABLE OF CONTENTS as PUBLICATION (or, if more than one, PUBLICATIONS). If the article title is listed in the TABLE OF CONTENTS, it should be shown as a first order subdivision. Publisher off-prints or page proofs are not acceptable.
5.2.4 Margins

Journal article pages must conform to margin requirements stated for the rest of your thesis.

5.3 Appendices

Appendices are not necessarily part of every thesis. Appendices are used for supplementary illustrative material, original data, computer programs, and other material not necessarily appropriate for inclusion within the text of your thesis.

Appendix sections are separated from preceding material by cover sheets with the heading APPENDIX (or, if more than one, APPENDICES) in all capital letters, centered, and without punctuation or underlining. This sheet is neither counted nor numbered.

5.3.1 One Appendix

If there is only one appendix, it will be treated as a major division in the TABLE OF CONTENTS and within the APPENDIX section. The heading APPENDIX (and title, if any) is listed in the TABLE OF CONTENTS as a major division heading.

Within the appendix section, the heading APPENDIX is centered and placed two inches from the top of the page. If the appendix has a title, place it below the word APPENDIX, centered at the top of the page in all upper case letters. If there is no room for the appendix heading on the first page, the cover sheet will suffice.
5.3.2 Multiple Appendices

When there are two or more appendices, each appendix is treated as a first-order sub-heading in the TABLE OF CONTENTS and in the APPENDICES section. List each appendix heading (the word APPENDIX and, if applicable, the title) in the TABLE OF CONTENTS under the major heading APPENDICES. Within the APPENDICES section, each appendix heading is shown centered at the one inch top margin of the first page of the individual appendix. Treat each appendix heading as other first-order sub-headings are treated in the text. If separate sheets are used to identify individual appendices, they are numbered and counted.

5.3.3 Appendix Tables and Figures

Appendix tables and figures must be included in the LIST OF TABLES and LIST OF FIGURES. Appendix tables and figures are subject to the same rules covering tables and figures in your text.

5.3.4 Margins

Appendices must meet the left margin requirement of one and one-half (1 ½) inches, but not necessarily the top, bottom, or right margin requirements.

5.4 Multi Volume Papers

The standard rule is, due to the thickness of cotton paper, theses containing 350 pages or more, or measuring 2 inches or more, must be divided.
Separation of thesis pages into volumes should come at the end of a major division or, at least, a “logical” place.

5.4.1 Cover Page

Each volume will have its own separate cover page. These will be identical except for the words VOLUME II, VOLUME III, etc. just below the title. The first volume does not need to be identified as such since it is understood that it is first. These cover pages are neither numbered nor counted. All other preliminary pages appear only in the first volume.

5.4.2 Page Numbers

Pages are numbered consecutively (1, 2, 3, 4 etc) starting with page 1, of the first volume, through the end of the last volume.

5.5 Multi Part Papers

If several chapters are grouped to form a part, the heading (e.g., PART ONE, PART TWO, etc.) and title of the part is written in capital letters and centered on a divider sheet. The divider sheets are numbered and counted.

The names of the parts are listed in the TABLE OF CONTENTS as major headings with their page numbers. Immediately following each divider sheet is the first page of the first chapter of each part. This page must carry the chapter number and title printed in capital letters, centered, and placed two (2) inches from the top of the page and the subheadings should be treated just as they would in a thesis not divided into parts.