Appendix C

FILE TEMPLATE FOR A THESIS, BOOK, OR LONG REPORT

Filename: ThesisTemplate.doc

Description: This template designed for long manuscripts, such as theses, dissertations, books, and reports. It is written in single-column format, with multi-level numbering (e.g., "Figure 3.2" as opposed to "Figure 7"). The template also contains extensive elements of front matter and back matter, rarely present in shorter documents, including dedications, acknowledgments, foreword, glossary, and index. Page numbering in the template follows the standard thesis page numbering, where front matter is numbered with roman numeral, and the rest of the manuscript with Arabic numerals.

[Ph.D. Dissertation Title]

[Author Name]

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

University of Washington
2009

Program Authorized to Offer Degree: Department of Electrical Engineering

University of Washington
Graduate School

This is to certify that I have examined this copy of a doctoral dissertation by

[Author Name]

and have found it complete and satisfactory in all respects,
and that any and all revisions required by the final
examining committee have been made.

Chair of Supervisory Committee:

—————————————————————————
[Committee Chair]

Reading Committee:

—————————————————————————
[Committee Chair]

—————————————————————————
[Committee member 2]

—————————————————————————
[Committee member 3]

—————————————————————————
[Committee member 4]

Date: _____

In presenting this dissertation in partial fulfillment of the requirements for a doctoral degree at the University of Washington, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of this dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Any other reproduction for any purposes or by any means shall not be allowed without my written permission.

Signature_____

Date_____

University of Washington

Abstract

[Dissertation Title]

by [Author Name]

Chair of the Supervisory Committee

Associate Professor Alexander Mamishev
Department of Electrical Engineering

This is the abstract of the dissertation. The abstract of a Ph.D. dissertation cannot be longer than *350* words. The abstract section does not go into the table of contents.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGMENTS

The acknowledgment section goes here. The acknowledgment section is not listed in the table of contents.

DEDICATION

[this page is optional and is not listed in the table of contents]

Chapter 1. Introduction

This is a template document for dissertations, master's theses, or other long manuscripts, including books. This document is specific to one institution, but the vast majority of universities use very similar formats.

1.1   Cover Page

The formatting of the cover page and first few pages needs to be followed exactly. There is no space to use creativity in this case. The degree name is strictly "Doctor of Philosophy," instead of "Doctor of Philosophy in Electrical Engineering." In the committee page, make sure you have the exact template as in this dissertation. The chair person should be listed twice, in a separate section and in the committee list. The acknowledgements, abstract, and vita sections should not show up in table of contents.

1.2   Table of Contents

The Table of Contents should be self-generated. The format of it can be changed through Insert-Index and Tables. The same is true for the List of Figures. The List of Tables can be generated in the same command window as the List of Figures.

In the Table of Contents, the list and pages of "List of Figures," "List of Tables," and "Reference" won't automatically generate. You can bookmark these titles at corresponding pages, and reference their page numbers in Table of Contents. In this way, you could auto generate the list in Table of Contents.

Do not forget to keep capitalization consistent in the Table of Contents. There should be at least two entries under each subheading (if you have 2.1, you must have 2.2). If you don't, reconsider your headings and organization scheme.
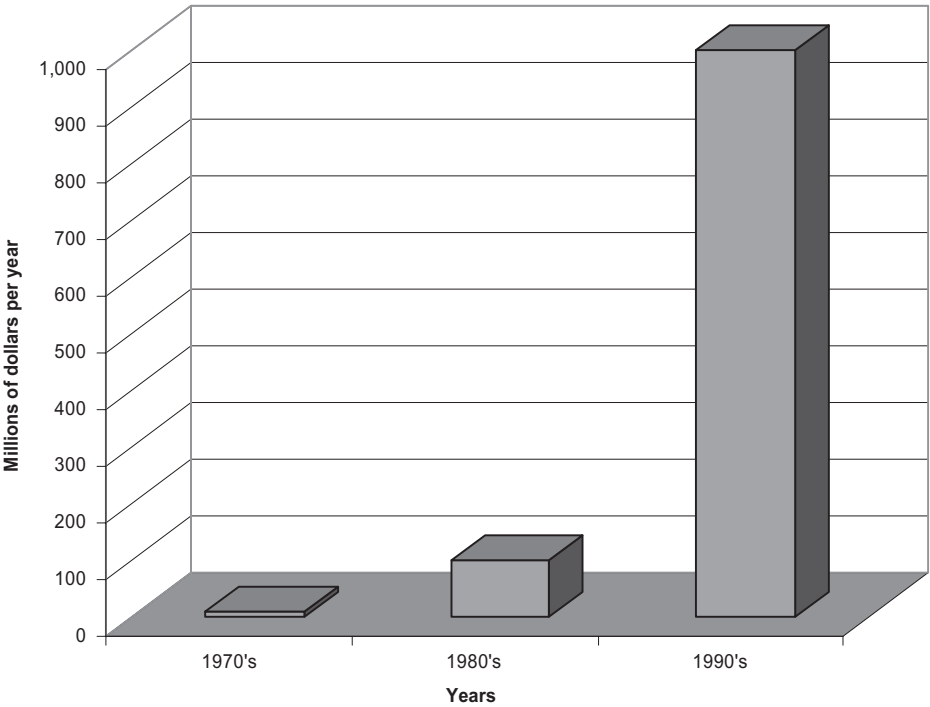
1.3   Chapter Title and Heading Title Style

Most universities have strict rules on the style of chapter titles and heading titles. The safest way is to follow this template and to consult with the appropriate parties who certify formatting of a thesis or dissertation.

1.4   Tables and Figures

Figure titles always go below the figure, while table titles always go above the table. This is a convention to be followed. In order to update numbering of all automated entries, click **Ctrl-A, F9**.

All figures should be numbered. To create a new figure, copy the existing figure (with the attached caption) and paste it to a new location. The figure template is designed in such a way that the caption stays with the image. Remember that letter and line thickness of each figure should be sufficiently large in order to be clearly legible in a double-column format.

Figure 1.1. Increase in the cost of power quality problems in the United States [1].

Figure 1.1 is an example figure. In order to cross-reference a figure click **Insert-Cross Reference-Figure-Only label and number**, then select the appropriate figure. This procedure is the same for tables. Also, the caption of the figure is recommended to have indentation on both sides so to distinguish from normal text.

1.5   Equations

The equations should be created using the template below and MathType software. MathType is superior to Word's built-in equation editor because it allows exporting to LaTeX and is faster.

To cross-reference an equation, you must first create a bookmark by highlighting the equation number, clicking **Insert-Bookmark**, and giving that a unique identifier. All equation identifiers start with "eq". For example, eqColoumbForce. Pay attention to the font of your variables. It is not ok to have "V" in the equation and "V" in text. Auto-numbering of figures and tables that correspond to chapters (e.g., Fig 3.3) is discussed in the next section.

1.6   Chapter Heading

First, you can define the style of headings of a chapter. Right-click on the line of the chapter's title and choose "Bullets and Numbering," push "Outline Numbered" tab, to

choose different sample styles. You can also "Customize" the style, like changing the "Number Format." For example, you can add "Chapter" in front of the chapter number to make this the format of Heading 1.

Next time, when writing a new chapter, just type in the chapter title, then choose "Heading 1." Your defined style will automatically appear.

Another method of adding "Chapter" in front of each chapter number is to create a "Chapter" character in other software, then copy it as a picture in front of the number.

If you make changes to the title format of one chapter, you can update all other chapters' title format at the same time, instead of redoing them one by one. Just re-click "Heading 1," a window of "Modify Style" pops up. Check "update the style to reflect recent changes."

1.6.1   Include Chapter Number in Figure Caption

To include the chapter number in a figure's caption, click "**Insert-Caption**" and choose label "**Figure**." Then click "**Numbering**," check "include chapter number" and also choose a desired format. Thus, the chapter number will be included.

1.6.2   Include Chapter Number in Equation Numbering

Normally only one number is assigned to one equation, as mentioned above. To include the chapter number, in front of the **original** equation number click "**Insert-Cross reference-Heading-Heading number,**" and then check the corresponding chapter. The chapter number will be present. Don't forget to add a "." between the chapter number and original equation number.

This is a sample equation [2]:

$$a = b- = c \qquad\qquad\qquad (1.1)$$

Equation counting does not restart from 1 in a new chapter. To solve this problem, in a new chapter (For example in Chapter 2, please refer to beginning of next chapter), right-click before the **original** equation number, check "Toggle Field Codes," the code will show up like "SEQ eq * MERGEFORMAT," add "2" after "eq" meaning the second (new) series of equation to "SEQ eq2 * MERGEFORMAT," then right-click "Toggle Field Codes" again, the second equation number in this new chapter will start from 1. For equations in the next chapter, just add "3" after "eq."

Also, it is very important to define every variable of the equation in the text nearby. If you use a lot of equations, it pays to learn shortcuts in MathType.

1.7   Section and Page Breaks

When writing a thesis, you are often required to use different styles of numbering for different sections. For example, Roman numerals are often used for preliminary pages, and Arabic numerals are used for text. You can achieve these differences by inserting section breaks: Insert-Break-Next Page (section break types). After that, you can adjust

the numbering style freely in each section. If you just want to start writing a new chapter from the next page in the same section (you want to continue the sequential numbering), you can just insert a Page Break.

1.8   Subsections

Please use the following style for the subsection heading titles.

1.8.1   Subsection Level 3

This section is just to show you how to make subsections.

1.8.1.1   Subsection Level 4

This section is just to show you how to make subsections.

1.9   Orphan Control

Orphan control is very important in order to pass the review of graduate school. Make sure that no page ends with a heading title (any level), and make sure the figure title and figure are on the same page. The same concept applies for tables and table titles.

Chapter 2. Complete Your Dissertation

Some professors use *Ph.D. dissertation* and *Ph.D. thesis* interchangeably, while some other professors do not feel comfortable with the wording *Ph.D. thesis*. So make sure you make all of them happy about this throughout your dissertation.

This is a sample equation [2]:

$$P(t, f) = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} A(\eta, \tau) \varphi(\eta, \tau) e^{j2\pi\eta t} e^{j-2\pi f\tau} d\eta d\tau \qquad (2.1)$$

where *t* represents time, *f* represents frequency, η represents continuous frequency shift, and τ represents continuous time lag. The ambiguity plane $A(\eta, \tau)$ for a given signal *s(t)* is defined as:

$$A(\eta, \tau) = \int_{-\infty}^{\infty} s(t) s*(t + \tau)^{j2\pi\eta t} dt \qquad (2.2)$$

Here *s(t)* represents the signal at time *t*, and *s(t+τ)* represents the signal at a future time *t+τ*, and the *s*(t+τ)* means the complex conjugate of *s(t+τ)*.

Table 2.1 is a sample table.

Table 2.1. A Sample Table Caption

Row 1	Value	Location
Row 2	1.89	**Y**
Row 3	1.94	N
Row 4	2.33	N
Row 5	1.45	N
Row 6	2.11	N

2.1   References

For literature citations, use EndNote software. The citations and references list should conform to the standards of your discipline.

It is very important to keep the consistency of the reference database file in the writing process, especially when you work on multiple computers.

2.2   Conclusions

This template document will be updated as more and more students start to work on Ph.D. dissertations. Please do note that the requirements for master's theses and Ph.D. dissertations are slightly different. Although this template may also be helpful for writing a master's thesis, it is important to identify the requirement differences and make appropriate changes.

End Notes

The current solution is to copy the whole reference section over.

References

[1]   B. Kennedy, *Power Quality Primer*, McGraw-Hill, 2000.

[2]   L. Cohen, *Time-Frequency Analysis*, Prentice-Hall, 1995.

Vita

A short bio of the author is required for a Ph.D. dissertation at the University of Washington. The vita section does not go into the table of contents. The formatting style follows the text of the dissertation.