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# The Effects of Climate Change on Tradeoffs in Forest Ecosystem Services

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**Abstract**

The Effects of Climate Change on  
Tradeoffs in Forest Ecosystem Services

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This sample dissertation is an aid to students who are attempting to format their theses with L<sup>A</sup>T<sub>E</sub>X, a sophisticated text formatter widely used by mathematicians and scientists everywhere.

- It describes the use of a specialized macro package developed specifically for thesis production at the University. The macros customize L<sup>A</sup>T<sub>E</sub>X for the correct thesis style, allowing the student to concentrate on the substance of his or her text.<sup>1</sup>
- It demonstrates the solutions to a variety of formatting challenges found in thesis production.
- It serves as a template for a real dissertation.

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<sup>1</sup>See Appendix A to obtain the source to this thesis and the class file.

## TABLE OF CONTENTS

	Page
List of Figures . . . . .	ii
Glossary . . . . .	iii
Chapter 1: Introduction . . . . .	1
1.1 The Purpose of This Sample Thesis . . . . .	1
1.2 Conventions and Notations . . . . .	1
1.3 Nota bene . . . . .	2
Bibliography . . . . .	3
Appendix A: Where to find the files . . . . .	4

## LIST OF FIGURES

Figure Number

Page

## GLOSSARY

ARGUMENT: replacement text which customizes a  $\text{\LaTeX}$  macro for each particular usage.

BACK-UP: a copy of a file to be used when catastrophe strikes the original. People who make no back-ups deserve no sympathy.

## **ACKNOWLEDGMENTS**

I want to thank all those that contributed to my earning this degree.

## **DEDICATION**

To ma femme and my family



## Chapter 1

# INTRODUCTION

The utility of a clean, professionally prepared thesis is well documented<sup>1</sup> and, even if you never intend to actually print your thesis, you still ought to format it as if that were your intention.

T<sub>E</sub>X facilitates that. It is a flexible, complete and professional typesetting system. It will produce **pdf** output as required by the Graduate School.

### ***1.1 The Purpose of This Sample Thesis***

This sample is both a demonstration of the quality and propriety of a L<sup>A</sup>T<sub>E</sub>Xformatted thesis and documentation for its preparation. It has made extensive use of a custom class file developed specifically for this purpose at the University of Washington. Chapter II discusses T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X. Chapter III describes the additional macros and functions provided by the custom thesis class file. Finally, Chapter IV hopes to tie things up.

It is impossible to predict all the formatting problems one will encounter and there will be problems that are best handled by a specialist. The Graduate School may be able to help you find help. Some departments may also be able to provide L<sup>A</sup>T<sub>E</sub>X assistance.

### ***1.2 Conventions and Notations***

In this thesis the typist refers to the user of L<sup>A</sup>T<sub>E</sub>X—the one who makes formatting decisions and chooses the appropriate formatting commands. He or she will most often be the degree candidate.

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<sup>1</sup>See, for example, W. Shakespeare[8] for a recent discussion.

This document deals with L<sup>A</sup>T<sub>E</sub>X typesetting commands and their functions. Wherever possible the conventions used to display text entered by the typist and the resulting formatted output are the same as those used by the T<sub>E</sub>Xbooks. Therefore, `typewriter type` is used to indicate text as typed by the computer or entered by the typist. It is quite the opposite of *italics*, which indicates a category rather than exact text. For example, `alpha` and `beta` might each be an example of a *label*.

### **1.3 *Nota bene***

This sample thesis was produced by the L<sup>A</sup>T<sub>E</sub>X document class it describes and its format is consonant with the Graduate School's electronic dissertation guidelines, as of November, 2014, at least. However, use of this package does not guarantee acceptability of a particular thesis.

## BIBLIOGRAPHY

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## Appendix A

### WHERE TO FIND THE FILES

The `uwthesis` class file, `uwthesis.cls`, contains the parameter settings, macro definitions, and other  $\text{\TeX}$  commands which allow  $\text{\LaTeX}$  to format a thesis. The source to the document you are reading, `kullman_thesis.tex`, contains many formatting examples which you may find useful. The bibliography database, `kullman_thesis.bib`, contains instructions to BibTeX to create and format the bibliography. You can find the latest of these files on:

- My page.

`http://staff.washington.edu/fox/tex/uwthesis.html`

- CTAN

`http://tug.ctan.org/tex-archive/macros/latex/contrib/uwthesis/`

(not always as up-to-date as my site)