

FULL THESIS TITLE

by

FIRST LAST

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

Doctor of Philosophy
(Chemical Engineering)

at the

FULL UNIVERSITY NAME

YYYY

Date of final oral examination: Month DD, YYYY

The dissertation is approved by the following members of the Final Oral Committee:

Advisor Name, Professor Short Department Name

CoAdvisor Name, Professor, Short Department Name

Committee MemberOne, Associate Professor, Short Department Name

Committee MemberTwo, Associate Professor, Short Department Name

Committee MemberThree, Associate Professor, Short Department Name

Committee MemberFour, Assistant Professor, Short Department Name

To the important person in my life who helped me.

ACKNOWLEDGMENTS

I hereby acknowledge everybody who has helped me achieve my doctoral degree.

I thank my advisor. I thank my committee.

I thank my group members.

I thank my personal friends in the city.

I thank my family.

Finally, if I missed someone, I'm sorry.

First Last
City, ST
Month YYYY

CONTENTS

LIST OF FIGURES	v
LIST OF TABLES	vi
ABSTRACT	vii
1 INTRODUCTION	1
1.1 Motivation	1
1.2 Notation and language	1
1.3 An overview of the thesis	1
2 CHAPTER TWO TITLE	3
2.1 Section One Name	4
2.2 Dragons	5
2.2.1 Dragons: What are they?	5
2.3 Winter is Coming	5
3 CHAPTER THREE TITLE	6
3.1 Famous Kingdons	6
3.1.1 Seven Kingdoms of Westeros	6
3.2 Casterly Rock	6
4 CHAPTER FOUR TITLE	8
4.1 Citations	8
4.2 History of \LaTeX	8
4.3 All about Radium	9
5 CHAPTER FIVE TITLE	10
5.1 Defining shortcuts	10
5.2 Using uwcbethesis-config.tex	11
6 CONCLUSIONS AND FUTURE DIRECTIONS	12
6.1 Contributions	12
6.2 Future research directions	12

A	APPENDIX A TITLE	14
A.1	Section One	14
A.2	Section Two	14
	BIBLIOGRAPHY	15
	INDEX	16
	VITA	17

LIST OF FIGURES

3.1	Rock of Gibraltar	7
-----	-----------------------------	---

LIST OF TABLES

2.1	Famous Swords	4
3.1	Seven Kingdoms of Westeros and their capitals	6

ABSTRACT

Here lies the summary of my journey of battles with dragons using swords and magic. This thesis regales you with tales of my adventure.

1

INTRODUCTION

1.1 MOTIVATION

This is the motivation. Motivate your audience. Why is your research important? Why is the reader reading your thesis? What new conclusions does this thesis gather?

1.2 NOTATION AND LANGUAGE

Put any guidelines here. If your thesis contains a lot of mathematics, I suggest you tell your audience about your notational scheme. Did you use the same symbols throughout your thesis or does the notation differ in every chapter?

Things like “How to read this thesis” are appropriate here.

1.3 AN OVERVIEW OF THE THESIS

This dissertation considers the following issues. I hope it enlightens you.

Chapter 2 – Chapter Two Title This text provides a summary of what Chapter 2

contains.

Chapter 3 – Chapter Three Title This text provides a summary of what Chapter 3 contains.

Chapter 4 – Chapter Four Title This chapter describes how to use citations and provided a brief history of L^AT_EX.

Chapter 5 – Chapter Five Title This chapter contains how to use shortcuts and the config file. Section 5.1 describes how to use shortcuts. Section 5.2 describes the use of the config file.

Chapter 6 – Conclusions and future directions. A summary of the major contributions of this dissertation is presented. Specific areas for improvement for future research are identified.

2

CHAPTER TWO TITLE

Now that you're starting a proper chapter, you can make better use of indexing. Index away the words that are specific to your thesis. Such as, this is how you index. Radium was discovered in the form of by Marie Curie and Pierre Curie in 1898.

Your job while indexing is to make things easier for the reader. Unlike a purely printed versions of written texts, a modern PDF (especially this one) allows for excellent searching using the "Find" option of a PDF viewing software. This somewhat lessens the need for an index — the reader can simply search for the keyword he or she is looking for. This means that your index should offer something else. I find that an index has value when the author has put some effort into it. For example, if you discuss a particular "radium" repeatedly in this chapter and then again in Chapter 4, then you should index "radium" once here and then once in Chapter 4. Don't index every occurrence of the word "radium" in the same chapter (unless your chapter is too long and diffused). The benefit of such indexing is that you've just saved the reader a lot of time. The reader when searching for "radium" will find that the "Find" functionality in the PDF viewer

Table 2.1: Famous Swords

Sword Name	Intended Swordsman	Story
Excalibur	King Arthur	Arthurian legend
Ice	Eddard Stark	A Song of Fire and Ice
Andúril	Aragorn	Lord of the rings

software finds every, single occurrence of the word. If you’ve mentioned the word 20 times or more in a chapter then this quickly becomes annoying. On the other hand, if the reader looks at your index, he or she will find two references to “radium” — one in this chapter and another in Chapter 4. The reader will thank you.

Also, you probably need a lot of references. So, cite away.

This chapter is organized as follows. In Section 2.1, I describe a lot of cool stuff. In Section 2.2 there is more cool stuff and dragons. Who doesn’t like dragons? Finally, in Section 2.3, I tell you that *Winter is Coming*.

2.1 SECTION ONE NAME

I promised you cool stuff and here it is — Valyrian Steel. Use it wisely.

Assumption 2.1 (Fundamental hypothesis of about swords). For every sword ever made, there exists a swordsman willing to wield it.

$$\forall \text{ Sword}, \exists \text{ Swordsman} \quad (2.1)$$

With this assumption, we proceed to list the famous swords.

A Hobbit's sword

Many do not consider a hobbit's sword to be a sword. Beware that who ridicules the hobbit's dagger because many an orcs have been killed at its edge.

2.2 DRAGONS

2.2.1 *Dragons: What are they?*

Definition 2.1 (Dragon). A *dragon* is a legendary creature, with serpentine or reptilian features.

2.3 WINTER IS COMING

Winter is Coming. I told you.

Here is a mathematical equation to help you out.

$$q = \epsilon \sigma \left(T_h^4 - T_c^4 \right) \quad (2.2)$$

3

CHAPTER THREE TITLE

3.1 FAMOUS KINGDOMS

3.1.1 *Seven Kingdoms of Westeros*

3.2 CASTERLY ROCK

According to Wikipedia, Casterly Rock was inspired by the Rock of Gibraltar. Figure 3.1 shows a picture of the Rock of Gibraltar, taken from Wikipedia.

Table 3.1: Seven Kingdoms of Westeros and their capitals

Kingdom	Capital
The North	Winterfell
Iron Islands	Pyke
Vale of Arryn	Eyrie
The Westerlands	Casterly Rock
The Reach	Highgarden
The Stormlands	Storm's End
Dorne	Sunspear

Figure 3.1: Rock of Gibraltar



Source: Wikipedia

4

CHAPTER FOUR TITLE

4.1 CITATIONS

Let's talk about citations. Ideally, you want to create a `.bib` file for your thesis. Avoid naming this bib file `thesis.bib` because it might get deleted¹. This thesis template comes with a file named `citations.bib`. Alternatively, you can store all your citations for all your latex projects in a common location. In Unix systems, this location is usually at

`~/texmf/bibtex/bib/`

4.2 HISTORY OF L^AT_EX

L^AT_EX [3] is a document preparation system based on T_EX [2]. T_EX was created by Donald Knuth, who is known for the multi-volume work such as Knuth [1].

¹Murphy's Law is especially powerful while writing a thesis. That's a fact. Always keep a current backup.

4.3 ALL ABOUT RADIUM

As promised, we talk about “radium” again. We discussed “radium” in [Chapter 2](#) as well. And, as discussed, we need to index “radium” here again.

5

CHAPTER FIVE TITLE

5.1 DEFINING SHORTCUTS

You will notice that I have a `shortcuts.tex` file in this thesis template folder. This file is then inputted in the file `uwcbethesis-config.tex`. The `shortcuts.tex` file contains many shortcuts that are going to be used repeatedly throughout in the thesis. For example, `\chaptertwoaname{}` is a shortcut defined in `shortcuts.tex` file.

I have also defined many math symbols that I have to use repeatedly. The following equations use these commands.

The following equation describes a n -dimensional random vector, \mathbf{X}

$$\mathbf{X} \sim \mathcal{N}(\mu, \Sigma) \tag{5.1}$$

distributed normally with mean vector μ and covariance matrix Σ . The probability

density of \mathbf{X} is given by

$$f_{\mathbf{X}}(\mathbf{x}) = \frac{1}{(2\pi)^{\frac{n}{2}} |\Sigma|^{\frac{1}{2}}} e^{-\frac{1}{2}(\mathbf{x}-\mu)^T \Sigma^{-1}(\mathbf{x}-\mu)} \quad (5.2)$$

5.2 USING UVCBETHESIS-CONFIG.TEX

Instead of typing out your name, department, title of your thesis, etc. this thesis template defines this data all at once in the file named `uvcbethesis-config.tex`. Please make use of these commands instead of repeatedly typing out the data. Not only does this help reduce the number of typographical errors, it enforces homogeneity. This thesis template uses the commands defined in this config file.

6

CONCLUSIONS AND FUTURE DIRECTIONS

6.1 CONTRIBUTIONS

Contribution One. In Chapter [2](#), I present a new method to do something great. This method has solved this problem which was not previously solved.

Contribution Two. In Chapters [3](#) and [4](#), I present some more new stuff. The work done by others was great but more work was required, which I did in these chapters.

Contribution Three. In Chapter [5](#), I present my final contribution. My masterpiece.

6.2 FUTURE RESEARCH DIRECTIONS

Future research One. More research is required in this area. In Chapter [2](#) I solve some of these problems but there is more work to be done.

Future research Two. More research is required in this area. I recommend that this method be adopted.

Future research Three. More research is required in this area. I hope someone continues my work.



APPENDIX A TITLE

This is an appendix. You should use an appendix for material which is important to present to the audience but which would distract the audience from the message if it were included in the main text.

An example is a long proof which is not central to the discussion in your main text. Another example is some software code that you think illustrates an idea. I would advise you not put large amounts of software code in the appendix because it is rather useless for the audience. People would use your code if it's available in digital form. Nobody wants to digitize your code. You can put a link to your code in your thesis.

A.1 SECTION ONE

Appendices can contain sections. Appendices are like chapters as you can see.

A.2 SECTION TWO

Another section in the appendix.

BIBLIOGRAPHY

- [1] Donald E. Knuth. *The Art of Computer Programming, Volume 2 (3rd Ed.): Seminumerical Algorithms*. Addison-Wesley Longman Publishing Co., Inc., Boston, MA, USA, 1997. ISBN 0-201-89684-2.
- [2] Donald Ervin Knuth. *Digital typography*, volume 78. Csl Publications, 1999.
- [3] Leslie Lamport. *Latex: A Document Preparation System*. Addison-Wesley Longman Publishing Co., Inc., Boston, MA, USA, 1986. ISBN 0-201-15790-X.

INDEX

Casterly Rock, [6](#)

cool stuff

 Valyrian Steel, [4](#)

famous kingdoms, [6](#)

motivation, [1](#)

Murphy's Law, [8](#)

radium, [3](#), [9](#)

radium chloride, [3](#)

Rock of Gibraltar, [6](#)

VITA

First Last was born in the city of Kingsport, King's Landing. He then went to college to study. Then he did internships. Then he decided to come to this university to do his PhD. He won these awards.

After graduation, he is going to join the Night's Watch at The Wall as the Lord Commander.

Permanent Address: Kingsport, King's Landing

This dissertation was prepared by the author with L^AT_EX 2_ε using his uwcbethesis template ¹

¹Feel free to remove this line.