

U-Iowa LaTeX Thesis Template - 2013

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This document explains some of what I did for my graduate thesis using $\LaTeX 2_{\epsilon}$. This will give you some guidance and advice regarding the thesis template. I have included the thesis manual for the graduate college effective in 2013. You will want to check to make sure it hasn't change and consider those changes when you do your thesis. I have included my thesis template:

```
uiDiss_srk_04082013.sty
```

and Ryan Allured's Thesis template, which I believe was originally edited by Alex Buhlman

```
uiDiss10_allured.sty
```

Between these two templates and your skills with $\LaTeX 2_{\epsilon}$ you should be able to figure out what is going on. I am assuming that you have a basic knowledge of $\LaTeX 2_{\epsilon}$ and if you do not, you may want to consider other options. Understand that this code was written in the late 90s and there might be a "better way" to write this thesis template, but until a graduate student or the graduate college become motivated enough, it will probably just be editing this code into submission.

I tried to comment my dissertation style file with areas that control various commands throughout the document. I have also included chapters, figures, and appendices that include declarations exactly as they appear in my thesis. All of these examples should hopefully make it clear how to declare and format your thesis.

- **Most Importantly:** As Ryan Allured pointed out "you will probably get about 9-10 things you need to edit when submitting your thesis." This is exactly what happened to me and I figure that it is likely that someone at the graduate college needs to justify their existence. I also noticed and changed things on Ryan's thesis, which got accepted, but got tagged on my thesis. So this is partially why I commented the thesis style file, so you can navigate and make changes to address those things you get tagged on.
- As a related comment, the person reviewing your thesis at the graduate college has basically looked at enough other theses to be able to point out where you missed this here, those margins are not quite correct there, or whatever they tag your thesis with. There is no magic beyond that, someone has basically looked at enough of these to know what mistakes you are making where.
- I used Ubuntu 12.04, wrote my thesis using Kile, and the Texlive distribution. If you are on Windows, you will probably be using MikTeX. If you're on a Mac I have no idea what you're using. What you choose to write your Tex document in is your business, but any basic text editor should suffice.
- When you are using the thesis style file BE AWARE of how things are defined. For example, when you are starting a new chapter, use:

```
\Chapter
```

and NOT

```
\chapter
```

which is the usual way it is defined in Latex. If you look at the style file, you will notice that the Chapter command is explicitly defined. My point is to be aware of these definitions. They might seem subtle, but you will notice that your page numbering or equation numbering will be off if you don't use them properly. (As an aside, this Chapter issue was something I found out about first hand.)

- For file management, I wrote a shell script called

```
compile_thesis_postbib.sh
```

which includes a bunch of symbolic links (Linux version of shortcuts "ln -s ...") which basically put individual chapters into the same directory as the main thesis file called

```
thesis_first_04082013.tex
```

At minimum you want to make sure your figures, style files (.sty), and bibliography files (.bib) are in the same directory when compiling. If you do not do that Latex will barf at you.

- Also note on the shell script that I included the flags to go into batch mode which effectively ignores any warning (and probably some error) messages that come out. This is mainly to simplify my life and if something is really messed up in the text, I will (probably) catch it.
- One of the big things you will need to determine is how you want to do the Bibliography. If you decide you want to use a .bib file containing your bibliography then you will have to the usual method at the bottom of mythesis.tex document:

```
\bibliographystyle{agu}
```

and

```
\bibliography{master_bib}
```

where agu corresponds to agu.bst the bibliography style for the American Geophysical Union, which is what I used and

```
master_bib
```

is the "Master bib" file containing all of my bibliography references. Then you will do the usual "latex bibtex latex latex" to compile (if you have no idea what I am talking about do a Google search). I used agu.bst because that is what I am familiar with, different fields will use different bibliography formats and the graduate college seems to recognize that.

The alternative method, which is shown directly in my thesis is to manually put in all of the bibitems directly. These came from the .bbl file and I just copied and pasted it in with a few other things to make sure the formatting was correct.

I would recommend you do whatever is most comfortable when it comes to the bibliography, but do something that is convenient and works well for you.

Aside from that, I wish you luck on writing your thesis!