My Thesis or Dissertation Title

A Dissertation Presented for the Doctor of Philosophy Degree The University of Tennessee, Knoxville

Smokey Volunteer

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Acknowledgments

I would like to thank...

Abstract

Abstract text goes here...

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Introduction

This is a very short guide to an unofficial thesis/dissertation template for the University of Tennessee. It has been updated to meet the specifications as of 2017 but can be easily altered as the guidelines are changed. This template requires a basic knowledge of LATEX and should cover the basic requirements in terms of required packages and functionality.

1.1 Disclaimer

This template is distributed with ABSOLUTELY NO WARRANTY. It serves as a guideline and constitutes a basic structure for a thesis/dissertation. The user assumes full responsibility for formatting and typesetting their document and for verifying that all the thesis requirements set by the University of Tennessee are met. Please refer to the most recent UT thesis guide http://gradschool.utk.edu/thesesdissertations/formatting/ or contact the thesis consultant (http://gradschool.utk.edu/thesesdissertations/). Please report any bugs to the thesis consultant.



Figure 1.1: UT thesis template folder structure.

1.2 Getting started

The general structure of this template is based on the tree shown in Figure 1.1. The titles of the folders are self descriptive and should guide you to proper file placement. Note that this is only a suggested model that could be modified to fit your own organizational structure.

There are two important files in this template: "my-dissertation.tex" and "utthesis.cls". The "utthesis.cls" is the class file that contains the settings, definitions, packages, and macros for this template to work properly and is located in the root directory. This file constitutes the document class for the template. It is based on the report class and provides some customized functionality. It will also generate a title page for you. In certain cases, one of the packages included in this template may conflict with a package that you are adding. You will have to resolve this conflict by either removing the package that is not being used or by modifying some settings with either packages. The packages that are preloaded in this class file are: amsmath, amsthm, amssymb, setspace, geometry, hyperref, and color.

The "my-dissertation.tex" file is the main file for your thesis/dissertation. This is where you bring all of the pieces together. Each individual section of your dissertation should be its own .tex file saved in the proper place. For example, a chapter for your dissertation should be saved in the "chapters" folder. Whereas your acknowledgments file should be saved in the "front-matter" folder. The "my-dissertation.tex" file is the file you compile to make your dissertation. It'll call all of the included files and compile the document properly. You may want to change the name of the file to something like "my-name-dissertation.tex". Next, invoke the proper options for the "utthesis" document class. This class will take all the options for the report class in addition to two options: thesis/dissertation and monochrome. If you are writing a thesis, you must use "thesis" otherwise, use "dissertation" or omit that option because dissertation is the default setting. The monochrome option converts all your document to monochrome - except figures. This is very useful when printing your document. Because this dissertation has colored hyperlinks, these will look washed out when printed on a monochrome printer. Therefore, it is handy to have a monochrome copy of your thesis for print.

Now you are ready to fill in the proper values corresponding to your title, name, degree, etc. This can be done in the following section:

```
% TO DO: FILL IN YOUR INFORMATION BELOW - READ THIS SECTION CAREFULLY
\title{My Thesis or Dissertation Title} % title of thesis/dissertation
\author{Smokey Volunteer}
                            % author's name
\copyrightYear{2017}
                            % copyright year of your
                             thesis/dissertation
\graduationMonth{May}
                            % month of graduation for your
                             thesis/dissertation
\degree{Doctor of Philosophy}
                     % degree: Doctor of Philosophy, Master of
                       Science, Master of Engineering...
\university{The University of Tennessee, Knoxville} % school name
```

1.3 References

The bibliography style used in this template is "apalike". It is an author-year style based on the APA specification. Here are a few examples. T. Hungerford wrote a book on Algebra, [4]. In 1999, D. F. Anderson and P. S. Livingston wrote the defining paper on zero-divisor graphs of commutative rings in [3]. You can also point out specific theorems in papers, such as the fact that the zero-divisor graph always has diameter less than or equal to 3, [3, Theorem 2.3]. You can also list several references at once. For example, for more on zero-divisor graphs see [1, 2]. However, you can change this style to any format you'd like. The code in the "my-dissertation.tex" file is

\utbiblio{#1}{apalike}{references-dissertation}

The first entry ("#1") must remain there. It deletes the title "Bibliography" from being printed again at the top of the bibliography page. The title "Bibliography" should only appear on the title page. The second entry can be changed to any natbib style you'd like. For example, plainnat, humannat, etc. The third entry is the name of your bibliography .tex file. Remember to run BibTeX in order to compile the bibliography correctly. For more information, visit http://merkel.texture.rocks/Latex/natbib.php.

1.4 Theorem environments

This template contains predefined theorem, lemma, proposition, corollary, and definition environments. For example,

Definition 1.1. This is your definition.

Proposition 1.2. This is an example of a proposition.

Theorem 1.3 (First theorem). This is an example theorem.

Proof for theorem. This is the proof for this theorem. \Box Lemma 1.4 (First lemma). This is the first lemma.

Proof. This is the proof for this lemma that requires Theorem 1.3. \Box

Corollary 1.5. This is the first corollary.

1.5 Figures and Tables

1.5.1 General Rules

To comply with the 2017 dissertation formatting, figure captions should be placed below the figure and table captions should be placed above the table. Also, if a table or figure takes up more than half the page, then there should be no text on that page (except for the caption of course). Lastly, you must allow tables and figures to float. DO NOT HARD CODE POSITIONS. In addition, no table or figure should go into the margins. If a table or figure does creep into the margins you can either resize it so that it properly fits within the margins, or put it on its own page and make that specific page landscape. See Figure 1.5 for an example. Note the page number location in the example. The code for this is given by:

```
\begin{landscape}
\thispagestyle{mylandscape}
\begin{figure}[h]
\centering
\includegraphics[width=9in]{32303-TheHill-byJoshQueener.jpg}
\caption{This view of The Hill is too wide for a portrait page.}
\label{fig:wide-pic}
\end{figure}
\end{landscape}
```

Be careful about where you place this landscape page, as well as all figures and tables. These objects are not considered part of the text, and thus their placement should not be assigned to a precise location. The general rule to follow is that no text page should have significant white space, with the exception being the last page of a chapter. So if you mention a figure in some paragraph but the figure will not fit on the remainder of the page, continue the text (even if it's a new section) to fill the current page with text and then place the figure on the next page. To see an example of this, consider this page you are reading now. We've mentioned Figure 1.5 in the previous paragraph. However, it requires a new page

and since there is plenty of space on this page, we've filled it with text and delayed the \begin{landscape} section of code until the appropriate position.

1.5.2 Single figures

For more information, check out the following page: http://en.wikibooks.org/wiki/LaTeX/Floats,_Figures_and_Captions

```
\begin{figure}[t for top, b for bottom, h for here]
    % Requires \usepackage{graphicx}
    \centering % center the figure
    \includegraphics[width=5in or 127mm etc...]{figure-name}\\
    \caption{figure caption}\label{figure label}
\end{figure}
```



Figure 1.2: Sample caption.

1.5.3 Multipart figures

For multipart figures, you need to use the package "subfig". here's an example:

\begin{figure}[h]

```
\centering
```

```
\subfloat[Circle]{\label{fig:figure-a}\includegraphics[width=1.1in]
    {fig02a-circle}}
```

```
\subfloat[Rectangle]{\label{fig:figure-b}\includegraphics[width=1.1in]
    {fig02b-rectangle}}
```

```
\subfloat[Cube]{\label{fig:figure-c}\includegraphics[width=1.1in]
```

```
{fig02c-cube}}
```

```
\caption{Geometric shapes.}
```

```
\label{fig:multipart-figure}
```

```
\end{figure}
```



Figure 1.3: Geometric shapes.

To add some space between the figures above, one can use the usual spacing commands such as "\qquad". For example,

```
\begin{figure}[h]
  \centering
  \subfloat[Circle]{\label{fig:fig-a-space}\includegraphics[width=1in]
      {fig02a-circle}} \qquad
  \subfloat[Rectangle]{\label{fig:fig-b-space}\includegraphics[width=1in]
      {fig02b-rectangle}}\qquad
  \subfloat[Cube]{\label{fig:fig-c-space}\includegraphics[width=1in]
      {fig02c-cube}}\qquad
  \caption{Geometric shapes with space between images.}
      \label{fig:multipart-figure-space}
```

\end{figure}



Figure 1.4: Geometric shapes with space between images.



Figure 1.5: This view of The Hill is too wide for a portrait page.

1.5.4 Tables

Again, table captions should be placed above the table. See Table 1.1 for an example and to learn about Smokey's history¹. For more information about tables, see https://en.wikibooks.org/wiki/LaTeX/Tables.

Dog	Years	Record	Pct.
Blue Smokey	1953-1954	10-10-1	.500
Smokey II	1955-1963	58-39-5	.597
Smokey III	1964-1977	105-39-5	.729
Smokey IV	1978-1979	12-10-1	.545
Smokey V	1980-1983	28-18-1	.608
Smokey VI	1984-1991	67-23-6	.744
Smokey VII	1992-1994	27-9	.750
Smokey VIII	1995-2003	91-22	.805
Smokey IX	2004-2012	62-53	.539
Smokey X	2013-present	21-17	.552

 Table 1.1:
 Smokey's History

¹According to Wikipedia: https://en.wikipedia.org/wiki/Smokey_(mascot)

Smokey In The Classroom

Smokey On The Field

Conclusions

Bibliography

- Anderson, D. F., Axtell, M., and Stickles, J. (2011). Zero-Divisor Graphs in Commutative Rings, pages 23–45. Springer New York, New York, NY. 4
- [2] Anderson, D. F., Frazier, A., Lauve, A., and Livingston, P. S. (2001). The zero-divisor graph of a commutative ring, ii. *Lecture Notes in Pure and Applied Mathematics*, 220:61–72.
- [3] Anderson, D. F. and Livingston, P. S. (1999). The zero-divisor graph of a commutative ring. *Journal of Algebra*, 217(2):434–447.
- [4] Hungerford, T. W. (1974). Algebra, volume 73 of Graduate Texts in Mathematics. Springer-Verlag New York. 4

Appendices

A Summary of Equations

some text here

A.1 Cartesian

some equations here

A.2 Cylindrical

some equations also here

B Summary of Stuff

some text here

B.1 More Things

some equations here

B.2 Other Aspects

some equations also here

Vita

Vita goes here. The vita should be a brief biography about the author written in third person and paragraph format. It should not be the author's resume or CV.