

Introduction to the TUthesis L^AT_EX style page

The TUthesis L^AT_EX style page was created by the Graduate School staff at The University of Tulsa to make it easier for you to generate a thesis or dissertation using L^AT_EX. Use of the L^AT_EX system to create a thesis or a dissertation is appropriate for students in all disciplines, but is exceptionally useful for creating theses, dissertations and other documents that contain a significant amount of mathematics.

Using the TUthesis style page

The TUthesis Directory contains the following files:

TUthesis.sty – The TU thesis style page
setspace.sty – A single/double space style page
README.TUthesis.pdf – The file containing this document

along with the following files that make up the TUthesis template/sample:

TUthesis.tex
MyBibliography.sample.bib
Chapter1.sample.tex
Chapter2.sample.tex
Appendices.sample.tes

These are the only TU specific files that you should need. The TUthesis.tex file is the main file. If you execute BIB_TE_X and PDF_LA_TE_X on this file (assuming that you have PDF_LA_TE_X running and that the other .sty and .tex files that have been listed above are in the same directory as the TUthesis.tex file), then the file TUthesis.pdf should be generated and will normally be placed in that same directory. This sample satisfies the **Guidelines for the Preparation of the Master's Thesis and Doctoral Dissertation** of the Graduate School of The University of Tulsa.

Please note that if you obtain copies of these files from other students or faculty, you will not be certain that they have not been changed or that they contain all of the updates included on the TU web-page. For these reasons, it is recommended that you obtain copies of these files directly from the TU thesis web page. Before you make any changes to any of these files, you should run PDF_LA_TE_X on the TUthesis.tex file as distributed by the Graduate School to make sure that everything is working well.

Creating your own document

If this run is successful, it is then recommended that you make a copy of these four sample files with your own names. You are then ready to begin modifying these files and to create your thesis or dissertation.

As indicated above, The TUthesis.tex file is intended be a file which generates a sample that satisfies the guidelines of the Graduate School for thesis and dissertations. In addition, it serves as a template for the creation of your own thesis or dissertation. Equally important is the fact that the file should also contain all of the TU specific documentation needed to use the template. The instructions are included as comments in the TUthesis.tex file.

Supporting Documentation

Over the years I have found several texts to be very useful in the working with both $\text{T}_{\text{E}}\text{X}$ and $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$. Many other $\text{T}_{\text{E}}\text{X}$ books are available, but here are three that I have used.

The $\text{T}_{\text{E}}\text{X}$ book by Donald E. Knuth,
Addison Wesley Publishing Company, 1986.

Math into $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$: An Introduction to $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and AMS- $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$
by George Grätzer, Birkhäuser, 1996.

$\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ A Document Preparation System by Leslie Lamport,
Addison-Wesley Publishing Company, 1986.

If you really want to get into the details of $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and the TUthesis style file, you may also want to look at:

The $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ Companion, by Frank Mittelbach and Michel Goossens,
Addison-Wesley Publishing Company, second edition, 2004.

Changes and problems

This section will summarize any changes that have been made to the TU \LaTeX template. The November update to the template involves changes to code in the style page that creates the TABLE OF CONTENTS. The template now automatically inserts a blank line between those items in the TABLE OF CONTENTS that come before Chapter 1. This will occur automatically when you use the November 2004 version of the template.

The second alteration to the TABLE OF CONTENTS changes the headings to bold face and the subheadings to italics. Now the font use in the text and in the TABLE OF CONTENTS is consistent. This correction involves renaming the **chapter**, **section**, **subsection** and **subsubsection** commands. They have been changed to **TUchapter**, **TUsection**, **TUsubsection** and **TUsubsubsection**. You should use the TU version of these commands so that you get the right fonts in the TABLE OF CONTENTS. If you have already started, you should be able to make this change with a few global substitutions.

In January 2005 it was reported that the template did not correctly number sections, subsections and subsubsections in the Appendixes. This has been corrected and the command **TUappendix** has been added. This command should be used as you would normally use the **TUchapter** command, except its use is restricted to the appendices. The subheadings will now be properly numbered as will the figures tables in the appendix.

In August 2005 changes were made to allow users to apply Latex (instead of PDF \LaTeX). A switch was implemented that allows the user to choose PDF \LaTeX or \LaTeX and the switch adjusts the margins. The extra space after "by" on the header pages was also removed.

In June 2007 the thesis template was overhauled to bring it into closer compliance with the Graduate School Guidelines. Many small changes were made. More significantly the template no includes the option of printing a test box, so that you can directly check that all of the margins are correct.

Thanks to Mike Spanehower and Jesus Gonzalez for sending me code that puts the correct page number in the Table of Contents in the case that the table or figure is more than one page.

Common Problems

One common problem that I noticed concerns the configuration file for PDF \LaTeX . The default on the page size is often the standard A4 European page size. One indication that you might have this problem is that you end up with margins that are the wrong size. The best way to determine if you have this problem is to check the page size on the bottom of your pdf file. The A4 page size is 8.27 by 11.69 inches. If this is the case, then you will need to change the pdftex configuration file. The file should be located in your \TeX directory in the subdirectory

`\texmf\pdf\config`

The file that you want is `pdf\config`. The first thing that you want to do is to create a backup of the file. Then change the page size from 210 mm and 297 mm to 8.5 true in and 11.0 true in respectively. Now run `PDFLATEX` again and check the page size. If this does not correct the problem, then you may have changed the wrong file.