

The **fsuthesis** L^AT_EX Class: A User's Guide

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1 Introduction to L^AT_EX

If you are already a T_EX/L^AT_EX convert, you may skip over this introductory material and jump ahead to the description of the `fsuthesis` class macros in section 5. If you're new to L^AT_EX, you may want to learn a little bit more about what you may be getting yourself into first.

If you have grown up only learning to use the word-processing tools that are installed on a typical PC, L^AT_EX may feel awkward at first. However, L^AT_EX's ability to generate cross-references, lists of tables and figures, and a table of contents—automatically—is already worth the small amount of effort required to get started with this very powerful typesetting system. Further, if your document contains mathematics, you'll be hard-pressed to find better software for making equations look good in type.

Historically, L^AT_EX is not a WYSIWYG¹ system. Instead, documents are created using any available plain text editor. When ready, the document is run through L^AT_EX to produce viewable or printable output. This two-step process may be different from what you're used to, but one advantage is that it allows authors to focus more on the content of their documents, and to focus less on the formatting (or at least to defer the attention to formatting until the final stages of document preparation).

2 Installation

2.1 The L^AT_EX System

The L^AT_EX system (and the T_EX engine upon which it is built) may require some time to get installed and running. But it is completely free software, and there are lots of resources for helping you to get started. These are much more comprehensive than this *User's Guide* can be.

If you are working in a Microsoft Windows environment, take a look at the MiK_TE_X project (see <http://miktex.org>). Mac users will find the MacT_EX resources useful (see <http://www.tug.org/mactex>). Linux/UNIX users should investigate the T_EX Live distribution, if T_EX is not already a part of your installation (see <http://www.tug.org/texlive>).

2.2 Plain Text Editor

In addition to the T_EX/L^AT_EX system, you will need a plain text editor. In a Windows environment, `notepad` is all that's required. You can use more so-

¹pronounced “wizzywig”: What You See Is What You Get

phisticated editors, of course, as long as the editor will save your document as a plain text file. Text editors are available on just about any modern computer platform, many of them free and high-quality. Linux/UNIX enthusiasts will probably already have access to and familiarity with **emacs** or **vim**, both of which have been ported to Windows and Mac environments. There exist more advanced document development environments for \LaTeX which include document previews and WYSIWYG functionality.

2.3 Installing the **fsuthesis** Class File

The **fsuthesis** class is packaged and distributed as a zip file. When the zip file is unpacked, a folder called **fsuthesis** is created. In that folder will be found this *User's Guide*, in both its PDF and \LaTeX source form, as well as a few other files, the **thesis-template** folder, and a **sample** folder.

The **fsuthesis** class file is called **fsuthesis.cls**. If you use the directory **thesis-template** as a starting point, the **fsuthesis.cls** file is already unpacked there and ready to use. You can copy the **thesis-template** directory to a new location and generate your document within that folder as a self-contained entity. No further installation is necessary.

Alternatively, you may install the **fsuthesis** class file for system-wide or permanent use. To generate the class file, run the following command:

```
latex fsuthesis.ins
```

This operation extracts the class file from the file **fsuthesis.dtx** (which contains documentation of interest to future maintainers of the **fsuthesis** class). Then copy the **fsuthesis.cls** file into the \LaTeX file search tree. (The proper location is operating system and installation-dependent. For UNIX/Linux systems, this location might be something like `/usr/share/texmf-site/tex/latex/fsuthesis/`.)

If you're interested in modifying the **fsuthesis** class, you may want to read the source code's documentation. To do this, run the following sequence of commands:

```
latex fsuthesis.dtx
makeindex -s gglo.ist -o fsuthesis.gls fsuthesis.glo
makeindex -s gind.ist -o fsuthesis.ind fsuthesis.idx
latex fsuthesis.dtx
```

Be sure to document your changes to the file by editing the **fsuthesis.dtx** file, not the **fsuthesis.cls** file, as changes to the latter file can be overwritten if the class file is re-extracted. (In the steps above, you may run

`pdflatex` instead of `latex` to generate a PDF version of the class file documentation directly.)

3 Helpful L^AT_EX References

For simple texts, you might not need more from L^AT_EX than what's described in this *User's Guide*. For more complicated texts, however, or for documents containing several tables, figures, or mathematics, you will certainly want to supplement your L^AT_EX references. You will find a wealth of information on-line using your favorite web search engine, as well as several bound and printed reference materials. I have found the texts cited below to be of particular value.

- For first-timers, *The Not So Short Introduction to L^AT_EX 2_ε* by Tobias Oetiker, Hubert Partl, Irene Hyna, and Elisabeth Schlegl promises to have you off and running in a few hours' time. It's a document you may find readily on-line in PDF form.
- The standard reference is the book *L^AT_EX: A Document Preparation System*, 2nd Ed., by Leslie Lamport, the original author of L^AT_EX. This text covers all the basics clearly and succinctly.
- A larger starting reference book is *Guide to L^AT_EX*, 4th Ed., by Helmut Kopka and Patrick W. Daly. At twice the length of the Lamport book, *Guide* covers all the basics, and it also touches on a few of the more common add-on packages. The book comes with a CD-ROM with the T_EX Live distribution included, which can save you a lot of downloading time.
- Once your working knowledge of L^AT_EX is secure, *The L^AT_EX Companion*, 2nd Ed., by Frank Mittelbach and Michel Goossens covers a broad range of topics and L^AT_EX add-on packages. This text goes far beyond the basics, but it's an indispensable reference if you're interested in customizing the appearance of L^AT_EX documents.

4 Working with L^AT_EX

Files you create for processing by L^AT_EX should have file extensions of `.tex`, e.g., `mythesis.tex`. For your own convenience, you may split the document into pieces (for example, one file per chapter), which may make the editing

process a little easier by keeping manageable the amount of text you must scroll through at any one time.

While you’re typing your document, you will insert macro commands (or “macros”) that mark up your document, indicating chapter and section headings, equations, tables, figures, etc. Markup languages attempt to separate the content of the document from its appearance. As an author, you need not be quite as concerned about how everything looks, just what it says. By marking up your document appropriately, you can let L^AT_EX worry about how everything looks.

A L^AT_EX document begins with a section called “the preamble”. In this section, you set up or change the document-wide processing settings (like page margins, or selecting the font size, for example). The rest of the document is called the document “body”. Some L^AT_EX commands are only allowed in the preamble, while others are allowed only in the document body.

5 The fsuthesis Class

L^AT_EX comes with several pre-defined standard document types (or classes), such as `article`, `book`, and `report`. The `fsuthesis` class is an extension of the L^AT_EX `report` class. In essence, the `fsuthesis` class provides all the features of `report`, along with customizations to meet the standards of FSU’s *Guidelines & Requirements for Electronic Theses, Treatises and Dissertations*, revised August 2011. The rest of this document describes how to use the features of the `fsuthesis` class.

5.1 Document Files

Packaged along with this *User’s Guide* and the `fsuthesis` class file, you will find a folder called `thesis-template`. Within the folder is a small collection of files, a skeleton upon which you may build your own document. I suggest that you copy and rename this folder in a new location, giving your *magnum opus* its own workspace.

For now, we’ll assume that you have renamed the folder `thesis`. Inside the folder, you’ll find a file called `mythesis.tex`. This will be your document’s principal file. We will assume that you will create additional files in this folder to add to your document, assuming at least one file per chapter. You are free to rename any of these files as you like, as long as they end with the `.tex` extension.

The document skeleton constitutes a complete document as it stands, and you may run `LATEX` on `mythesis.tex` immediately if you need to test your installation. (How you run `LATEX` is platform-dependent, so you may need to refer to the section on `INSTALLATION` above for references specific to your environment.) The rest of this *User's Guide* follows the contents of `mythesis.tex`, demonstrating the features of `fsuthesis`.

5.2 Macros and Comments

`LATEX` macros (often used interchangeably with “commands”) begin with a ‘\’ (backslash) character, followed by text. Macros will often take arguments, and possibly optional arguments. Optional arguments are usually included in square brackets (e.g., [*option*]) immediately following the macro invocation. Required arguments will usually be found in curly braces (e.g., {*This is a required argument*}) following the optional argument (if present).

The percent sign (%) is another special character in `LATEX`. It introduces a document comment, which runs to the end of the line. Commented text is ignored by `LATEX` entirely, and will not be typeset. If you need to print a percent sign as part of your text, precede it with the backslash character (‘\’). E.g.,

```
... total is 23\% of adjusted gross ...
```

(See one of the references above for a complete list of `LATEX` special characters.)

5.3 The Document Preamble

If you look at the file `mythesis.tex`, you will see that it consists primarily of `LATEX` macros and “commented out” lines containing more `LATEX` macros. As you add text and flesh out your document, you may “uncomment” additional lines in this primary file by removing the leading percent sign, thereby making the line active.

5.3.1 Document Options

The first line of every `LATEX` document declares the type of document to be processed, along with a few processing options. The first line of the document skeleton file `mythesis.tex` contains the following line:

```
\documentclass[11pt]{fsuthesis}
```

This line declares the document type to be `fsuthesis`, and that the text will be set in 11-point type.

Class `fsuthesis` is derived from the `report` class, so all the standard document options supported by `report` will be supported by `fsuthesis`. (See one of the L^AT_EX references above for complete lists of document options.) The `fsuthesis` class supports three additional document options: `hardcopy`, `chapterleaders`, and `expanded`.

The `hardcopy` option adds extra space along the binding edge of a page. This may be useful for printing hard copies for review by your thesis committee, or if you want to have a professionally bound copy of your thesis or dissertation. If you also include the standard `report` option `twoside`, then in addition to the binding-edge offset, all the chapters of your document will be forced to start on odd-numbered (right-hand) pages.

The `chapterleaders` option adds leader dots on chapter headings in the *Table of Contents*. Normally, chapter headings are displayed in bold type with a page number and *without* leader dots, while by default, sections and subsections are displayed with leader dots connecting their page numbers. If you write a thesis without sections or subsections, or if you suppress their display in the *Table of Contents*, then you might want to specify the `chapterleaders` option.

The `expanded` option makes your document “double-spaced”. (In reality, the document is about 1.5-spaced.) Some colleges, schools, or departments will prefer expanded spacing to allow committee members to pencil in comments.

5.3.2 Extra Packages

L^AT_EX has many document feature add-ons. If you wish to load additional packages, these options should follow the document class selection. Be warned that some packages may not be compatible with the `fsuthesis` class. Many optional packages may already come installed with your T_EX/L^AT_EX distribution, or you can download and install them from the CTAN website (www.ctan.org).

In the skeleton document, several `\usepackage` lines have been commented out. If you have title, chapter, or section headings which include mathematics, you may want to uncomment the `textcase` package line, as this will prevent the titling macros from upper-casing the math symbols inappropriately.

If you will be inserting figures into your document electronically, you should uncomment the `graphicx` line. You can find some simple examples of

figure inclusion in the `sample` directory, but for the highest quality output, you owe it to yourself to learn more about this topic. Searching the web for “latex figure inclusion” or other similar terms will turn up some useful links.

If you are generating an electronic version of your document for which you’d like to have hyperlinks automatically connecting cross-references and entries in the *Table of Contents*, you should uncomment the `hyperref` line. If you find that you are suddenly getting “Overfull hbox” errors while using `hyperref` (where there were none before), you could try adding the line `\hypersetup{breaklinks=true}` to your document, inserted just after the `\usepackage{hyperref}` line. The `hyperref` package has lots of configuration options, and you should refer to the package documentation for helpful information.

5.3.3 Thesis/Dissertation Description Macros

The next section in `mythesis.tex` contains several macros that customize the title page and committee page of your document. As a general rule, these macros require text arguments that should be given in mixed case using title capitalization rules (i.e., each word capitalized, except for articles, prepositions, and conjunctions; refer to your discipline’s preferred style guide if in doubt). All proper names should be capitalized normally. If the FSU *Guidelines* require elements to be displayed differently (all-caps, for example), the `fsuthesis` class will make the adjustments required for you.

The `\title` macro declares the title of your thesis or dissertation. If the title is long, it will be broken over several lines on the title page. You have control over how the title is broken into lines by using the L^AT_EX line-separator operator (`\\`) in the title. (This command is what the L^AT_EX manual calls “fragile”, and so you must say `\protect\\` when used in the argument of the `\title` command.)

The `\author` macro gives your name. Your name should be given as specified in the FSU *Guidelines*.

The `\college` macro should contain the official name of your school or college.

If your degree comes from a school or college with separate academic departments which issue degrees, the `\department` macro should declare this name. Otherwise, you should comment-out or delete the `\department` line from your document file.

The `\manuscripttype` should be set to one of the following words, as appropriate: `Thesis`, `Treatise`, or `Dissertation`.

The title of your degree (e.g., “Master of Arts” or “Doctor of Philosophy”) is given by the `\degree` macro.

The macro `\semester` should be set to one of `Fall`, `Spring`, or `Summer`, according to the semester in which your degree was awarded.

The year your degree is awarded should be given by `\degreeyear`. This should be a full 4-digit year.

The date of your thesis, treatise, or dissertation defense should be specified in the `\defensedate` macro. Refer to the FSU *Guidelines* for the appropriate format.

If you are generating a PDF file, you can add a subject and search keywords to the document’s internal description. The document title and author’s name will already be included in the document metadata by default. To add a subject to the metadata, use the `\subject{my subject}` macro. To add search keywords, use the `\keywords` macro, separating each search term by commas or semicolons.

5.3.4 Committee Macros

The `fsuthesis` class provides macros for generating your committee information page. The `\committeeperson` macro takes two arguments. The first argument is the name of the committee member, given without titles. The second argument is the committee membership status, e.g., “Professor Directing Dissertation” or “Committee Member”. (See the FSU *Guidelines* about the appropriate options.) You should provide one `\committeeperson` line for each person, in the order in which they should appear on the committee page.

5.3.5 Changing Other Settings

You may change other document defaults while still in the document preamble. For example, should you want to change the width of the text column or the page margins, here’s where you would do it. (Note that you must still adhere to FSU’s *Guidelines*, so be sure you know what you’re doing.)

5.4 The Document Body

If there are no more adjustments to be made, you begin the document body with the \LaTeX command `\begin{document}`. You will notice that whenever you `\begin{something}`, you should always supply a corresponding `\end{something}`, or \LaTeX will complain. So at the end of `mythesis.tex`,

you will find the `\end{document}` command. Anything beyond this point in the file is ignored by L^AT_EX.

5.4.1 Front Matter

The first element after `\begin{document}` should be the macro command `\frontmatter`, which sets up roman numeral page numbering for the document elements that precede the first chapter of your thesis or dissertation. The document skeleton in `mythesis.tex` contains place-holders in the proper order for all the optional elements of the front matter. Uncomment those elements that you will use, or you may leave commented or delete those elements that you don't use.

Immediately following `\frontmatter`, the macro commands `\maketitle` and `\makecommitteepage` generate the document title and committee pages, respectively. Information for these pages is gathered from the data you have already set in macro calls in the preamble.

If you wish to include a dedication in your thesis or dissertation, uncomment the `\begin{dedication}` and `\end{dedication}` lines, and type your dedication between them. The text that you insert will appear about 1/3rd of the distance from the top of the page. The rest of the formatting is up to you.

Likewise, if you wish to include acknowledgments in your document, uncomment the `\begin{acknowledgments}` and `\end{acknowledgments}` lines, and insert the acknowledgment text between these lines. The resulting page will have the centered heading **ACKNOWLEDGMENTS**, followed by your text. If you wish to rename the heading, add the following line to your document preamble:

```
\renewcommand*{\acknowledgement}{My Acknowledgement Heading}
```

The next item in the front matter is the *Table of Contents*, which is generated for you automatically by the macro `\tableofcontents`. By default, the *Contents* page(s) will contain entries for the remaining front matter material, and entries for chapter headings, section headings, and subsection headings. If listing section or subsection headings provides too much detail for your taste, you may remove these entries by resetting the L^AT_EX counter `tocdepth`. L^AT_EX considers chapter headings to be Level 0, section headings to be Level 1, and so on. The default setting of `tocdepth` is 2 (so subsection headings are included). To include only chapter and section headings in the *Contents*, for example, you could reset `tocdepth` in the document preamble with the following line:

```
\setcounter{tocdepth}{1}
```

The FSU *Guidelines* state that if you have more than one figure or table in your document, the figures and/or tables should be contained in their own lists. Turn each of these options on by uncommenting the `\listoftables` and/or `\listoffigures` lines in `mythesis.tex`. These tables will be generated for you automatically when your document is processed. For those documents which contain multiple musical examples, a list of these may also be generated by uncommenting `\listofmusex`.

It is sometimes the case that a *List of Symbols* or a *List of Abbreviations* might be helpful to your readers. If you wish to include such document elements, uncomment the appropriate `\begin–\end` pair, and add any text you may require. These entities would likely consist of tabular material, so you’ll want to dig into L^AT_EX table-making using any of the basic references mentioned earlier.

The last common element of the front matter is a document abstract. Insert your text between the abstract `\begin–\end` pair. If you wish to change the default heading of **ABSTRACT**, you may do so by adding the following line to your document preamble:

```
\renewcommand*{\abstractname}{My Abstract}
```

5.5 The Main Text

At last, with the preliminaries out of the way, you may now get to the meat of your document. Following the abstract, the command `\mainmatter` restarts page numbering at “1” in arabic numerals, ready for your first chapter.

The skeleton file `mythesis.tex` has been set up to include the first chapter from an external file. Note the command

```
\input chapter1
```

This tells L^AT_EX to insert the text of the file `chapter1.tex` at this position and continue processing. There is nothing special about the file names, except that they should end with the extension `.tex`. Otherwise, you may call the external files whatever you like. (However, avoid using filenames with spaces or special symbols, as these may be difficult for either L^AT_EX or your operating system to handle properly.) You can break up large chapters into even smaller pieces if you like, and then change `mythesis.tex` accordingly, e.g.,

```
\input chapter1a  
\input chapter1b
```

Or you could just continue adding text to `mythesis.tex` directly, avoiding having to deal with any other external files entirely. This is all up to you.

5.5.1 Sectioning/Heading Macros

Several levels of headings are provided by the `fsuthesis` class, in the heading styles defined by FSU's *Guidelines*. By default, entries down to the subsection level are listed in the *Table of Contents*. (See the description of the `\tableofcontents` macro above for information on changing this default.) Listed from the highest level down, these sectioning commands are:

- `\chapter`
- `\section`
- `\subsection`
- `\subsubsection`
- `\paragraph`
- `\subparagraph`

Each of these macros take a single argument, the text of the heading. All headings should be capitalized as titles, i.e., mixed case text, each word capitalized except articles, prepositions, and conjunctions. Chapter headings will force the start of a new page. The file `chapter1.tex` in the `thesis` folder has some example text to get you started. If chapter titles include mathematics, you may want to uncomment the `textcase \usepackage` line near the beginning of the template document should you find your symbols becoming inappropriately upper-cased.

By default, section and subsection headings are prefixed by section and subsection numbers. Sub-subsections produce an unnumbered in-line heading as the opening of a paragraph. Paragraph and sub-paragraph headings also produce in-line headings and start new paragraphs, but with subtler font selections.

You may change the level at which the heading macros produce numbered entries by setting `secnumdepth`. The default setting is level two, which means that subsections will be numbered automatically. To stop numbering at the `section` level (for example), reduce the value of `secnumdepth` to one by issuing the following command in the document preamble:

```
\setcounter{secnumdepth}{1}
```

By setting `secnumdepth` to zero, you may disable all heading numbering except at the chapter level. Or you may increase the value up to five to generate heading numbers all the way down to the sub-paragraph heading level.

5.5.2 Insertions: Figures, Tables, Musical Examples

The `fsuthesis` class provides the standard \LaTeX environments for `figures` and `tables`. An additional environment called `musex` has been added for those authors who need to provide musical examples. The `musex` environment behaves similarly to the `figure` environment, except that captions include the heading “Example” instead of “Figure”, and all the musical examples can be listed in the front matter in the *List of Musical Examples*.

By setting material off in a `figure`, `table`, or `musex` environment, the material will be allowed to drift from its position in the text to the closest available location as follows: if there is space for the material at the bottom of the current page, it will be placed there; otherwise, it will be placed at the top of the next page, or perhaps on a page by itself. (You have some control over the placement of floating elements. For more detail, you’ll need to consult one of the \LaTeX references.)

Each `figure`, `table`, or `musex` should contain a \LaTeX `\caption` macro whose single argument contains the text of the caption. For figures and musical examples, the caption should be placed below the figure or musical example. For tables, the caption should be located above the tabular material. Examples of the use of each of these environments can be found in the in the `sample` directory.

\LaTeX keeps track of the number of tables, figures, and musical examples, and your caption will be labeled and numbered automatically. The caption text will also be inserted into the appropriate *List of . . .* if you requested the list in the front matter of your document.

\LaTeX has many features to assist you in producing tabular material of arbitrary complexity. Also, simple diagrams may be created using the \LaTeX `picture` environment. If you want to include graphics generated by external software, then you’ll need to learn to use the features of the `graphicx` package, and you should uncomment the appropriate `\usepackage` command in `mythesis.tex` preamble. You are strongly advised to refer to the \LaTeX references cited earlier to learn more about figures and tables if you intend to use them in your manuscript.

5.5.3 Cross References

One of the advantages of working with \LaTeX is the ability to automatically cross-reference equations, figures, tables, and musical examples. In writing and revising your manuscript, it is likely that references to elements may shift as text is added or moved around. \LaTeX addresses this problem by

allowing you to assign a *label key* to each element. Then you make a reference to an element’s label key in your text to retrieve its number or page location. When your document is processed, L^AT_EX replaces all the label key references with their numerical values.

As an example, let’s take a look at how this might work if we wish to refer to an equation in our text. In the left column is the result of what we’ve typed in the right column (unimportant text omitted for brevity).

Leonhard Euler was a prolific mathematician whose pioneering work in power series helped to develop the field of mathematical analysis. Equation 1 on page 14 is known as *Euler’s Identity*, what physicist Richard Feynman called “the most remarkable formula in mathematics”.

$$e^{i\pi} + 1 = 0 \quad (1)$$

```
Leonhard Euler was a prolific
...
Equation~\ref{eq:euler-id} on
page~\pageref{eq:euler-id} is
...
\begin{equation}
e^{i\pi} + 1 = 0
\label{eq:euler-id}
\end{equation}
```

The `equation` environment automatically numbers equations for us. The macro `\label{eq:euler-id}` creates the label key “eq:euler-id”, tied to the automatically-numbered equation. If we want to access the equation number, we may use the `\ref{eq:euler-id}` macro, while the macro `\pageref{eq:euler-id}` retrieves the page number. For figures, tables, or musical examples, the `\label` command should be located within the `\caption` text.

Since your text may `\ref` label keys before the corresponding `\label` has been encountered, you will need to run your document through the L^AT_EX processor *at least twice*. The first pass will write all the label keys and page numbers out to an auxiliary file, and the second pass will then be able to resolve all the references properly. (L^AT_EX will complain about unresolved or changed references, reminding you to run the processor a second time.)

As you’re writing your document, you might want to keep a list of the label keys you’ve created so that you don’t have to surf through other files to recall what a particular label key was. Keep in mind that figures, tables, musical examples, and equations all use the same label system, and all label keys must be unique. You may develop your own label key standards (like using `eq:` when referencing an equation to avoid label “collision”, for instance). If you expect to have lots of figures, tables, etc., you may find it helpful to use descriptive label keys rather than generic ones, as they may be easier to remember. E.g., `fig:map-Europe-pre1914` is probably more mnemonic than `fig:MapOne`.

5.6 Back Matter

Following the major chapters of your manuscript, you may have additional material for one appendix or more. To shift from chapter headings to appendix headings, insert the macro `\appendix` at the end of your last chapter, before the first appendix. Then use the `\chapter` macro just as you have for each of your chapters. (Appendices will be lettered rather than numbered.)

5.6.1 References/Bibliography

The `fsuthesis` class provides two options to produce a bibliography or references section. No matter which of the two options you choose, the heading of the section may be set in the document preamble with the following command:

```
\renewcommand*{\bibname}{Bibliography}
```

According to FSU's *Guidelines*, this section should be called "References" if entries in the section contain only references cited in the text of your manuscript. The section should be called "Bibliography" if the entries in this section cover a broader scope of material than is actually cited in your manuscript.

The first (and simplest) option is to use the `references` environment. Begin this section with `\begin{references}`. (Despite the environment's name, the section heading is still determined by setting `\bibname`.) Then add each bibliographic entry with a blank line between each reference. Follow the last entry with `\end{references}`. With this option, you will have to format each entry according to the style guide you have chosen to follow.

The second option is to set up a `BIBTEX` database. To use `BIBTEX`, you create or download a separate file of reference materials in a particular format. Then you may cite any of these references within your manuscript using the `\cite` macro. By running `LATEX` in combination with `BIBTEX`, citations are resolved (similar to how labels are resolved), and a list of the cited references are pulled into your document automatically. To use this feature, you first select the bibliographic style, and then specify the `BIBTEX` database file:

```
\bibliographystyle{plain}  
\bibliography{myrefs}
```

This selects the `plain` bibliography style, and the `BIBTEX` database is said to reside in `myrefs.bib`. Processing your document now requires a few extra steps as well:

- Run \LaTeX
- Run \BibTeX
- Run \LaTeX *twice more*

If you have a relatively small number of bibliographic entries or citations, then choosing the **references** environment is probably the easiest solution. However, if you are trying to manage a large number of citations or work in a discipline that has already established a large \BibTeX database, then it may save you considerable effort to learn how to use \BibTeX , in which case you will certainly need to use one of the \LaTeX references mentioned earlier.

5.6.2 Biographical Sketch

At last, you’ve reached the final page of your *magnum opus*. It will contain your biographical sketch, starting with `\begin{biosketch}`, and ending with `\end{biosketch}` as usual. Insert what biographical material you wish to include here.

6 Keeping Things in Order

If you have lots of figures or musical example files in your document, you may want to keep these files in the sub-folder already created for you. This helps to keep your thesis folder a little less cluttered. Then if you have a chart called `pie.eps` stored in the **figures** folder, you just need to include the folder name when issuing the `\includegraphics` command, e.g.,

```
\includegraphics{figures/pie.eps}
```

You can create any number of folders and sub-folders to help keep your files organized.

7 More Examples

The files in the **thesis-template** directory are only a bare-bones template to help you get started on your own manuscript. You will find a more complete example of a thesis manuscript in the **sample** directory. The \LaTeX source files in this directory contain explanatory comments and many more examples of useful code. The file `thesis.pdf` in the **sample** directory is the result of processing the source files, so you can easily compare the source files to the output to see how everything works. You’ll find some simple

examples of equations, figures, tables, and bibliographic citations to help you create your own document. You can find much more help from the web should you need more sophisticated examples.

8 Bugs, Corrections, Improvements

Should you discover what you think is a bug in the way that `fsuthesis` formats your document, you may e-mail me at `bwhissel@fsu.edu`. It would be helpful to send the portion of your document which you believe is misbehaving. Likewise, if you think that the appearance of theses or dissertations may be improved in some way, or if you have some macro definitions that you think may be generally useful and could be added to `fsuthesis`, I am happy to hear your ideas.

Also, if you think that any of this documentation is misleading or unclear, *please* let me know. I wish to make this *User's Guide* and the `fsuthesis` class as helpful as possible.

Please note that I cannot help you to learn features of `LATEX`: there are many resources and tutorials that are freely available, and I am unable to support individual requests for help with anything that does not pertain directly to the `fsuthesis` class.

Best wishes, and good luck!