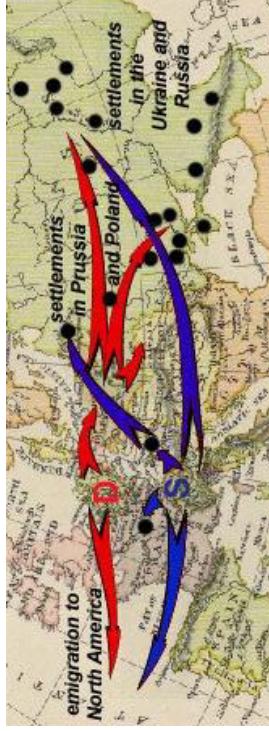


```
\begin{figure}
\caption{Swiss and Dutch Mennonite migrations of the 1700s and 1800s}\label{img}
\centering
graphics must be in EPS format for standard LATEX, JPG, PNG, or PDF for pdfLATEX
\includegraphics[width=.8\columnwidth]{menno-a}
\\ \scriptsize Courtesy of Paul C. Adams, Department of Geography and the
Environment, University of Texas at Austin. \cite{adams}\end{figure}
```

Figure 1: Swiss and Dutch Mennonite migrations of the 1700s and 1800s



Courtesy of Paul C. Adams, Department of Geography and the Environment, University of Texas at Austin. [1]

Footnotes, citations, references, and indexes (back matter)

Footnotes are done with a simple command,² see below. Citations using BIB_T_E_X (Patashnik, 1988) are also easy (see [2], §7.4.2) and there are packages for more complex formats for journals and publishers. You can add indexes for more complex formats for journals and publishers. You can add indexes with the `\index{index}` command and the `\textsf{makeindex}` program. with the `\index` command and the `makeindex` program.

```
Footnotes are done with a simple command, \footnote{like this.} see below. Citations
using BIB\TeX{} \citeauthor{year-foren} are also easy (see \cite{§7.4.2}{flyn}) and
there are packages for more complex formats for journals and publishers. You can
add indexes with the \verb'\index' command and the \textsf{makeindex} program.
add the following at the end of your document and create myrefs.bib (see BIBTEX manual [3])
\bibliography{myrefs}\bibliographystyle{apalike}
```

References

- Adams, Paul C. *Linguistic Chaos in Montreal*, www.utexas.edu/depts/grg/adams/chaos.ppt, 2/59, Oct 2006.
- Flynn, P. *Formatting Information*, 2005, at latex.silmaril.ie/formattinginformation/
- Patashnik, O. *BIB_T_E_Xing*, T_E_X Users Group, 1988 (distributed with all copies of L_AT_E_X).
- Sherrington, J. example 'table in 'Informative Presentation of Tables, Graphs and Statistics', 4.2, Statistical Services Centre, University of Reading, www.reading.ac.uk/ssc/publications/guides/toptgs.html
- T_E_X Users Group, for 'T_E_X Live (www.tug.org/texlive/) and CTAN (Comprehensive T_E_X Archive Network) for downloads (www.ctan.org).

Note. Commercial implementations of T_E_X with business support are available from Personal T_E_X, Inc (PC_T_E_X); Blue Sky Research (Textures [Mac]); MacKichan Software, Inc (Scientific Word); Micropress, Inc (V_T_E_X), TrueT_E_X Software (TrueT_E_X), and others.

²Like this.

The very short guide to typesetting with L^AT_E_X

Silmaril Consultants
Textual Therapy Division
latex.silmaril.ie
July 2009

What's this all about? What's L^AT_E_X?

L^AT_E_X is a document preparation system for the T_E_X typesetting program. It enables you to produce publication-quality output with great accuracy and consistency. L^AT_E_X works on any computer and produces industry-standard PS or PDF documents. It is available both in free (open-source) and commercial implementations. L^AT_E_X can be used for any kind of document, but it is especially suited to those with complex structure, repetitive formatting, mathematics¹, technical stability, and dimensional accuracy.

Syntax (how to type L^AT_E_X commands — these are the rules)

☞ All L^AT_E_X commands begin with a backslash.

Example: `\tableofcontents`

☞ If a command needs text to work with, it goes in curly braces.

Example: `\title{Irisches Tagebuch}\author{Heinrich Böll}`

☞ If options are used, they go in square brackets first.

Example: `\documentclass[a4paper,11pt]{book}`

☞ Space after commands *without* braces gets suppressed.

Example: `Copyright \copyright 2009` `Copyright ©2009`

To prevent this, put empty curly braces after the command.

Example: `Copyright \copyright{} 2009` `Copyright © 2009`

☞ Curly braces are also used to restrict the scope of effects inside them.

Example: `Some {\tiny little} word` `Some little word`

Creating and typesetting your document

- Create your document using any suitable plain-text editor with L^AT_E_X controls, eg *T_EXshop* (Mac), *T_EXnicCenter* (Win), *Kile* (Linux), *Emacs* (all);
- Save the file with a name ending in `.tex` (*never* use spaces in filenames!);
- Use the toolbar buttons or menu items in your editor to typeset and display the document;
- Make any changes needed in your original document and repeat step 3.

Note. This guide shows only a tiny fraction of L^AT_E_X's power. For information, visit the T_E_X Users Group site (www.tug.org). For help, see the FAQ (www.tex.ac.uk/faq) and the Usenet newsgroup `comp.text.tex`. For packages, use the Comprehensive T_E_X Archive Network (www.ctan.org). For documentation, use the sources in the *References* [2].

¹For reasons of space this guide does not cover details of mathematics typesetting.

Here's the skeleton of a \LaTeX document. These three lines are *compulsory*: your document will not work without them:

```
your preamble goes here (extra setups, if any)
\begin{document}
your document text goes here
\end{document}
```

- 📖 The document class name must be one of book, article, or report, or one you have installed yourself (eg thesis, memoir, etc).
- 📖 There are paper size options a4paper (210 mm × 297 mm) and letterpaper (8 1/2" × 11") and others (eg a5paper).
- 📖 There are base type size options 10pt (the default), 11pt, and 12pt.

The **preamble** is where you specify any extra **packages** (L^AT_EX plugins) such as typefaces or special formatting requirements, and where you put any changes to standard features.

`\author{your name}`
`\date{date of publication}`

the paragraphs of the abstract go here

\tableofcontents

rest of the document goes here

In a typical report or article, the title, author, date, abstract (summary), and table of contents (optional) all go at the start, followed by your text.

Leave a blank line between paragraphs. This does *not* mean you get a blank line typeset, it just means ‘start a new paragraph here’. `\TEX` will format your text according to the document class and packages you are using.

Sections get numbered automatically in bold type, and get included in the Table of Contents (if any). Numbering can be turned off selectively. Section heading layout can be modified with the sectsty, titlsec, and other packages. Use the babel package for other languages.

\tableofcontents

text for the section goes here

subsubsection{*heading of a subsection*}

section{heading of a new section}

text for the section goes here

Составляющие статьи

For cross-references, use `\label{...}` to label the target and `\ref{...}` and/or `\pageref{...}` to refer to it. Make up the label values; `TeX` will use them to work out the right numbers to print.

`\pageref{blah}`. ...section 3 on p.9.

L^AT_EX's default typeface is Computer Modern. There is a selection of other typeface packages (use them in your Preamble):

Times	mathptmx	Courier	courier
Palatino	mathpazo	Avant Garde	avant
Bookman	bookman	Helvetica	helvet
Charter	charter	<i>Zapf Chancery</i>	chancery
Utopia	utopia	Pandora	pandora
New Century Schoolbook			newcent

Dozens of others are available, including mathematical and decorative fonts. To switch to a sans-serif type family (eg Helvetica, Avant Garde), use `\sf family` in your text. To change font for a word or phrase, use these commands (they can be nested—see below):

Boldface `\textbf{Hello}` **Hello**

Sans-serif
+ serif
Hello

`monospace \cexccc{hello} hello`

Example: `\textit{\textbf{\textsf{bold ital sans}}}` **bold ital sans**

Font sizing is automatic for titles, headings, and footnotes. There are named step-size commands (in points, relative to the base size):

\normalsize	10	11	12
\tiny	5	6	7
\scriptsize	6	7	8
\footnotesize	7	8	9
\small	9	10	11
\large	11	12	14
\Large	12	14	17
\LARGE	14	17	20
\huge	17	20	24
\Huge	20	24	28

but you can specify an exact size with the `fix-cm` package and the command `\fontsize{pp}{bb}\selectfont` for any point-size (`pp`) on any baseline (`bb`). Group (enclose) the command *and* its applicable text in curly braces to prevent it affecting the rest of the document. For wider line-spacing (eg in theses) use the `setspace` package. You can also use colour with the `xcolor` package and the `\color{name}` command.

There are three basic kinds: **itemized** lists (bulleted); **enumerated** lists (numbered or lettered); and **descriptive** lists (topic-and-

explanation format). Others can be defined or downloaded from CTAN [5].

<pre> \begin{tizeize} \item 1lb Sugar \item 3/4pt Cream \item 4pts Cream \item Chocolate \end{tizeize} </pre>	<pre> \begin{enumerate} \item Mix together \item Boil to 112°C \item Stir and cool \end{enumerate} </pre>	<pre> \begin{description} \item[Fudge] is fun... \item[Fudge] is fun... \item[Broccoli] sucks... \item[Exercise] is good... \end{description} </pre>
<ul style="list-style-type: none"> 1lb Sugar 3/4pt Cream Chocolate 	<ol style="list-style-type: none"> 1. Mix together 2. Boil to 112°C 3. Stir and cool 	<p>Fudge is fun but not if made too often.</p> <p>Broccoli sucks, period.</p> <p>Exercise is good for you if taken daily and not to extremes.</p>

You can nest lists inside each other. See packages like `paralist` and `mdwlist` to control list formatting.

Formal tables and figures *float* (change position to fill available space) so they may not be printed where you typed them.

\caption{Mean growth rate and intake

diets.}

```
\begin{tabular}{l|l|l|l|l|l}
\end{tabular}
```

```
&(g/day)&(g/day)&(ml/kg$~f0.75}$&
```

Lucerne & 145&450&10.5&144\\

Leucaena&128&364& 8.9&121\\

```
\end{tabular}
\end{figure}
\end{document}
```

Table 2: Mean gr

Supplement	Growth rate (g/day)	Supplement intake (g/day)	Milk intake (ml/kg ^{0.75})	Water intake (ml/kg ^{0.75})
Lucerne	145	450	10.5	144
Sesbania	132	476	9.2	128
Lucerna	128	364	8.9	121
None	89	0	9.8	108

Packages like longtable and array can help with more complex table formats.

For help, see the links on the front and back pages. There is a summary of common commands at www.stdot.org/~winston/latex/latexsheet.pdf and a comprehensive list at computing.see.ethz.ch/~soft/latex/green/ltx-2.html.