

L^AT_EX, A Short Course

Introduction

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- L^AT_EX (pronounced LAY-tek) is a document preparation system, or a typesetting system.
- L^AT_EX is not a word processor.
- L^AT_EX is more like a markup language, like HTML.

- Word is a WYSIWIG word processor.
 - Text appears as it will be printed as you type.
 - Graphical interface.
 - Saved in proprietary binary format.
- L^AT_EX is a typesetting system.
 - Text and formatting commands are input into a plain text file.
 - Command-line interface (some graphical front-ends are available)

- Let's create the "source" for our first document.
- Using your favorite text editor, in the workfiles directory, type the following into a file called `hello-world.tex`:

```
\documentclass{article}
\begin{document}
This is my first typeset document.
\textit{Hello world!}
\end{document}
```

- Now we have the text and formatting commands typed in, we need to actually typeset the document.
- Type the following commands:

```
pdflatex hello-world
```
- Notice that you now have a few more files in your directory, including a PDF file containing your typeset document.
- Double-click the PDF file in the Finder to view it.

- Text can be entered freely. \LaTeX will decide where line breaks should be and control spacing between words.
- Paragraph breaks are indicated by inserting a blank line.
- Try putting a blank line between “Hello world” and the previous sentence in your `hello-world.tex` file.
- Notice the effect of `\textit`. Experiment by changing this to:

```
\texttt  
\textsl  
\textsf  
\textsc  
\textbf
```

- You can nest shape and weight commands, provided they don't conflict. Try adding the following somewhere in your hello-world:

```
\textit{I really need \textbf{this} word to have extra emphasis.}
```

- Notice the default font size for your document is 10pt. Try changing the first line of your hello-world document to:

```
\documentclass[12pt]{article}
```

You can't specify arbitrary font size in this way, only a few preset values (usually between 8 and 12pt).