

Editor Instructions

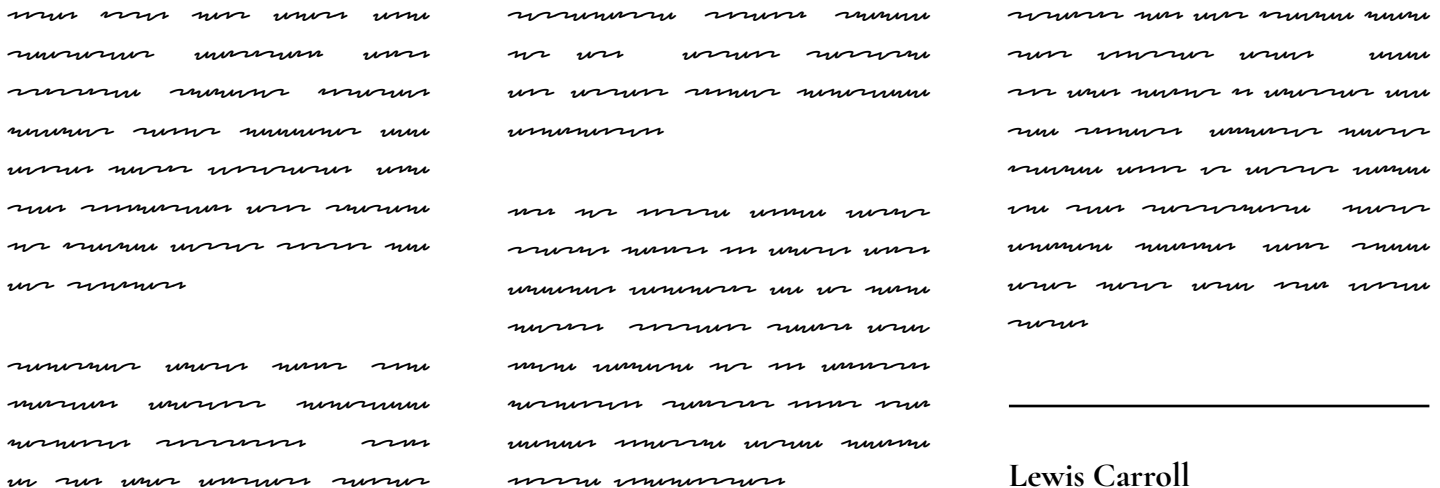
This document will help you get up and running with magazine creation. If you're thinking, "What is L^AT_EX?", I have a short intro section at the end of this document!

Author names

To insert an author name, type in the following code near the end of the article.

```
\begin{author-name}  
Lewis Carroll  
\end{author-name}
```

The line will automatically stretch to fill the current text container. In the following example, I placed the author environment before `\end{multicols}` to have it only take up one column.



```
\begin{author-name}  
Lewis Carroll  
\end{author-name}
```

Preamble

Some articles require some explanatory text or a disclaimer before the main content. Use the preamble environment for this.

```
\begin{preamble}
```

Insert disclaimer text here, an intro, etc...

```
\end{preamble}
```

Section Titles

Use the `\section{}` argument for article titles

```

\newcommand\BackgroundPictureAliceA{%
  \put(0,0){%
    \parbox[b][\paperheight]{\paperwidth}{%
      \vfill
      \centering
      \includegraphics[width=\paperwidth,height=\paperheight,%
        keepaspectratio]{../Images/Alice-article-background-A.png}%
    }
  }
}

```

What is \LaTeX ?

\LaTeX is a free program used to create beautifully typeset documents like books, theses, and newsletters. It is very different than Microsoft Word. Instead of selecting text and clicking on a button to make it bold or *italicized*, you write code like `\textit{}` for italics. It seems like more work than necessary, but there are several strong advantages for using \LaTeX .

Beautiful typography

\LaTeX automatically handles a lot of typesetting details including:

- Kerning - aesthetically pleasing spacing between letters based on their shapes
- Ligatures - new characters for letter combinations like *fi* and *ff*, which often crash into each other in Word documents (see Figure 1 for a comparison).
- Text justification without creating white rivers of blank spots
- Consistent styles for section headers, citations, figure captions and numbering, etc.
- and more!

Really, only typography nerds will notice or care about these details. But professional-quality typesetting does have an overall effect on the appearance of the document.



Figure 1: Ligatures are specialized characters that replace letter combinations like *fi*. Left: Word does not automatically include ligatures, so these letters clash. Left: In this Word example, notice the collision between the curve of the *f* and the dot in *i*. The word *office* also has slightly misaligned *f*'s. Right: \LaTeX has full support for ligatures. These words showcase the *ffi* and *fi* ligatures.

No manual formatting

You don't need to manually adjust spacing, figure numbers, or page numbers.

Uses Plaintext

Word documents often crash when they get too large or have too many images. Since \LaTeX uses plaintext files (`.txt`) and sources images externally, your document stays small and portable. Plaintext files can open on any operating system, and they aren't locked into a specific version or program. You can open decades-old `.txt` files and they still work. You can easily link your writing to version control software like Git.

Alice was beginning to
get very tired of
sitting by her sister
on the bank, and of having
nothing to do: once or twice
she had peeped into the book
her sister was reading, but it
had no pictures or
conversations in it, “and
what is the use of a book,”
thought Alice “without
pictures or conversations?”

LICE was beginning
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tions?”

Figure 2: This figure highlights the differences between Word (left) and \LaTeX (right). Notice how Word creates a misaligned drop-cap and awkward justification, with several gaps (highlighted in red).

Handles large, complex documents well

\LaTeX makes it easy for you to manage large documents like a thesis or book because it allows for easy cross-referencing of figures, footnotes, quotes, and citations. To add a list of figures, just type `\listoffigures`!

Inserting a new page or image into a lengthy document (typically a harrowing process in Word) is not difficult in \LaTeX and you have a lot of control over the layout of your sections. It’s easy to move things around, and \LaTeX will automatically re-number all your figures and footnotes.

Mathematics

One of the best features of \LaTeX is its mathematical typesetting. This includes auto-aligned equations and the ability to add specialized mathematical notation.

$$\int_a^b u \frac{d^2v}{dx^2} dx = u \frac{dv}{dx} \Big|_a^b - \int_a^b \frac{du}{dx} \frac{dv}{dx} dx.$$