University of Zurich[UZH]

LaTeX Tutorial

Cognitive and Behavioral Decision Research (CBDR)

October 24, 2022 (last updated January 2024)

First things first

How to pronounce LaTeX

LaTeX is usually pronounced ***lah-tech*** or ***lay-tech*** (with *tech* sounding like *tech*nology)

Basic setup

Level I. Use Overleaf

Simply go to Overleaf and start using templates to write and compile your text.

To avoid manual references/bibliography, install:

- Zotero
- Better BibTeX extension. Better BibTeX automatically updates your library export when you make additions to your library.

When exporting a library from Zotero:

- Export collection
- Format: Better BibLaTeX
- ☒ Keep updated
- ☒ Background export

Overleaf allows library integration.

Level II: LaTeX on your computer

If you plan on using LaTeX more extensively, consider setting it up locally on your computer:

- Install a TeX distribution
- Install a LaTeX editor. Sadly, Atom was archived. Visual Studio Code is a good alternative.

When using VS Code, the following extensions are useful (among others):

- LaTeX Workshop: For typesetting and compiling PDFs
- GitLens: For handling anything git-related within VS Code
- Code Spell Checker: Basic spell checker

Level III: Start using Git

To keep your files tidy and updated (without having to save them as FINAL_VERSION_V9), make the most of LaTeX by integrating it with Git.

- Install Git for version tracking
- Install a Git client for easier use: e.g., Sourcetree
- Or use Git from your terminal

For more information on Git, see this datacamp or W3Schools tutorial.

Why LaTeX?

Advantages

- **Separates content from design**. LaTeX formats all your text for you with commands that you use => No more nervous breakdowns trying to layout your Word document
- Easy **integration with Zotero** => No more error-prone manual in-text citations
- **Invisible comment**s in the .tex file that aren't rendered in the .pdf => Leave yourself comments without disrupting the reading flow
- Suitable for **version control** with Git (whereas binary files like Word documents are not) => View exactly what you changed without having to save a separate new version of the document (see changes made in `example_word_doc.docx` vs. `latex_ms_template_apa7.tex`)
- **Free and works on all operating systems** => No matter if you use Mac OS, Windows, or Linux: You can open .tex files in any text editor without compatibility issues

Disadvantages

- Initially harder to use than Word -> Requires some time and commitment to get used to
- Raw .tex file not as pretty as Word document -> No immediate preview of how the .tex file will be rendered
- Tables are a bit of a nightmare…

Let’s get started

Example .tex file

Head to Overleaf and open one of the University of Zurich templates, or copy and paste the contents of `latex_ms_template_apa7.tex` inside the 'Manuscript Template' folder into a blank project.

Or you can already try rendering the .tex file in your local text editor (e.g., Visual Studio Code).

To add more citations, check out the `example.bib` file and integrate some references in the text.

- In-text citations: `\textcite{article_citation_key}`
- Parenthetical citations: `\parencite{article_citation_key}`

See `biblatex-cheatsheet.pdf` for support on how to reference publications in a .tex file.

Where to learn more about LaTeX

- Overleaf has great documentation