

L^AT_EX Course

Syllabus - Spring 2023

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Objective of the Course

L^AT_EX is a famous text editor mostly used in academics to write any documents, such as dissertations, papers, or CV, as well as to present slides. This course is intended to provide the basic knowledge of the most important commands of L^AT_EX. At the end of this course, students will be able to use L^AT_EX to write a full document - including tables, figures, and bibliography - and presentation.

Installing L^AT_EX

In order to use L^AT_EX you will need some softwares installed on your computer. I recommend TEXmaker [<https://www.xmlmath.net/texmaker/download.html>]. Of course, you are free to use the one you prefer.

- **Mac:**
 - TEXshop [<http://pages.uoregon.edu/koch/texshop/>]
 - MacTex [<http://www.tug.org/mactex/>]
- **Windows:**
 - MiKTEX [<http://www.miktex.org/>]
- **Linux:**
 - You might have already installed LATEX on your system. If not, use your package manager to install the following packages: 1) texlive - the base TEX/LATEXsetup; 2) emacs (with AUCTeX) - an editor that integrates tightly with LATEX through the add-on AUCTeX package; 3) ghostscript - a PostScript preview program; xpdf and acrobat - a PDF preview program; 4) imagemagick - a free program for converting bitmap images; 5) gimp - a free Photoshop look-a-like; 6) inkscape - a free illustrator/corel draw look-a-like.
- **Online Editor:**
 - OverLeaf [<https://it.overleaf.com/>]

For a list of (many) text editor with L^AT_EX support see [http://en.wikipedia.org/wiki/Comparison_of_TeX_editors].

Topics

1. What is LATEX?

2. How to write with LATEX: introduction to basic tool, documentclass, usepackages, environments;
3. How to write math with LATEX;
4. How to insert Figures and Tables with LATEX;
5. Writing a Dissertation: Layout of the first page; Bibliography; List of content, figures and tables;
6. How to write a presentation with LATEX: Beamer.

References

Tobias Oetiker (1995), "The Not So Short Introduction to LATEX" downloadable at:
<https://tobi.oetiker.ch/lshort/lshort.pdf>.

Stefan Kottwitz (2011) "Beginner's guide" downloadable at:
http://static.latexstudio.net/wp-content/uploads/2015/03/LaTeX_Beginners_Guide.pdf

These are just suggestions, any useful available source is accepted.