

# A Very Short Introduction to $\text{\LaTeX}$

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# Agenda

- Pros & cons
- Online v. local installations
- Basic document structure
- How to structure text

# Agenda

- How to add graphics, tables from R, math formulas
- How to cite: styles, commands, .bib-files from Zotero
- Useful tools: Mathpix, tables generator
- Discussion



Purely rationalist and structuralist explanations are still prevalent, but conflict scholars now increasingly argue that there is a link between compliance with international norms of statehood and the behavior of certain non-state actors: Just like Franklin on behalf of the Second Continental Congress, rebel groups that wish to secede from an existing nation-state to determine their own destiny mimic states' behavior in the international system and towards the domestic population in order to garner recognition and material support.

/home/leo/Desktop/test1/Final\_Essay\_Latex.tex - TeXstudio

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Final\_Essay\_Latex.tex X

```
\documentclass[12pt]{article} % Default font size is 12pt, it can be changed here

\usepackage[margin=1in]{geometry} % Required to change the page size to A4
\geometry{a4paper} % Set the page size to be A4 as opposed to the default US Letter

\usepackage{abstract, adjustbox, amsmath, amssymb, array, indentfirst, fancyhdr, float, listings, longtable,
multicol, multirow, natbib, parskip, setspace, tabu, tabularx, tikz, titlesec, verbatim, xcolor}
\usepackage{eso-pic, atbegsh, pdflscape, dcolumn}
\usepackage{ifthen, calc}
\usepackage{wrapfig, lipsum}
\usepackage{booktabs, tabularx, rotating}
\usepackage{listings}
\usepackage{indentfirst}
\usepackage{pdfpages}
\usepackage{graphicx}
\usepackage[format=plain,up,textfont=normal,up,justification=centering,singletlinecheck=false]{caption}
\usepackage[bottom, hang, flushmargin]{footmisc}
\setlength{\headheight}{22pt}
\lstset{basicstyle=\ttfamily, columns=flexible, breaklines=true}
\PassOptionsToPackage{hyphens}{url}
\usepackage[colorlinks=false, hidelinks]{hyperref}
\onehalfspacing

\begin{document}

\setlength{\parindent}{0.5cm}
\parskip=0pt
\setcitestyle{aysep={}}

%-----
% TITLE PAGE
%-----

\begin{titlepage}

\newcommand{\HRule}{\rule{\linewidth}{0.5mm}} % Defines a new command for the horizontal lines, change
thickness here

\centering

\textbf{\LARGE University of Maryland\!\!\! 1.5cm \& Name of your university/college}

Line: 77 Column: 13 INSERT
```

1 of 9

UNIVERSITY OF MARYLAND

COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES

DEPARTMENT OF GOVERNMENT AND POLITICS

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Super Clumsy Title

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*Author:*  
Leo H. M. BAUER

*Supervisor:*  
Prof. John SMITH

October 12, 2021

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Process started: pdflatex -synctex=1 -interaction=nonstopmode "Final\_Essay\_Latex.tex"

Process exited normally

Page 1 of 9 103% en\_US UTF-8 Ready Automatic

# Why Should I Use L<sup>A</sup>T<sub>E</sub>X?

- Many people in our discipline use it
- Free & open source
- Saves time when document is long & complex
- Saves time when you have working templates
- Looks great when using math formulas, tables & plots

# Reasons to L<sup>A</sup>T<sub>E</sub>X

- It takes time to make it work
- Many pathways to the same result
- Seemingly unsolvable problems
- Problems may be connected to your computer

# Online

- Overleaf
- Pros:
  - Requires no local installation
  - Many packages preinstalled
  - Good for collaboration (requires paid subscription)



# Online

- Cons:
  - Slow with long documents
  - Requires many re-uploads of plots & bibliographies
  - Depends on the internet

# Local Installations

- Windows: TeX Live or MikTeX package manager & TeXstudio (don't use TeXworks)
- Mac: MacTeX
- Pros:
  - Fast even with long documents
  - Better workflow when using plots & .bib-files
  - Doesn't depend on the internet

# Local Installations

- Cons:
  - Full installations eat up disk space
  - Possible incompatibilities with your computer
  - You cannot collaborate

document.tex X

```
\documentclass[12pt,a4]{article}
```

```
\usepackage{setspace}
```

```
\singlespacing
```

```
\begin{document}
```

```
    Hello world!
```

```
\end{document}
```

<

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Home

Desktop

test1

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

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🗑️ Trash

+ Other Locations

Name	Size	Modified — Time
 Chicago16.bst	26.4 kB	4 May 2017 10:19 PM
 DVIVTERRSECbox.pdf	54.6 kB	27 Dec 2019 2:46 PM
 Final_Essay_Latex.aux	2.2 kB	5:41 PM
 Final_Essay_Latex.bbl	1.2 kB	5:41 PM
 Final_Essay_Latex.blg	1.0 kB	5:41 PM
 Final_Essay_Latex.lof	115 bytes	5:41 PM
 Final_Essay_Latex.log	40.8 kB	5:41 PM
 Final_Essay_Latex.lot	0 bytes	5:41 PM
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 Final_Essay_Latex.tex	7.6 kB	5:41 PM
 Final_Essay_Latex.toc	423 bytes	5:41 PM
 FinalPaper.bib	19.6 kB	28 Dec 2019 1:08 PM

# Installation

- Overleaf: <https://www.overleaf.com/>
- MikTeX: <https://miktex.org/>
- TeXstudio: <https://www.texstudio.org/>
- Integrate TeXstudio with MikTeX: <https://math65740.blogspot.com/2015/06/installing-miktex-and-texstudio-on.html>
- TeX Live: <http://tug.org/texlive/>
- MacTeX: <https://www.tug.org/mactex/>

# Useful Tools

- Mathpix: <https://mathpix.com/>
- Tables generator: <https://www.tablesgenerator.com/>
- Zotero L<sup>A</sup>T<sub>E</sub>Xplugin: <https://retorque.re/zotero-better-bibtex/>
- R L<sup>A</sup>T<sub>E</sub>Xtable packages : stargazer for summary statistics and regression tables, xtable for pretty much anything else