A Very Short Introduction to LaTeX

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Agenda

- Pros & cons

- Online v. local installations

- Basic document structure

- How to structure text

- How to add graphics, tables from R, math formulas

Agenda

- How to cite: commands, .bib- & .bst-files

- The Beamer class

- 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.

TeXstudio — /home/leo/Desktop/test1/Final_Essay_Latex.tex

```latex
\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
\usepackage{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, atbegshi, 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,singlelinecheck=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

\textsc{\LARGE University of Maryland}\\[1.5cm] % Name of your university/college
```

Line: 77   Column: 13   INSERT

Messages | Log | Preview | Search Results

Process started: pdflatex -synctex=1 -interaction=nonstopmode "Final_Essay_Latex".tex

Process exited normally

PDF Preview:

UNIVERSITY OF MARYLAND

COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES

DEPARTMENT OF GOVERNMENT AND POLITICS

Super Clumsy Title

Author:
Leo H. M. Bauer

Supervisor:
Prof. John Smith

October 12, 2021

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Why Should I Use LaTeX?

- 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

- Convenient citing & bibliography creation

Reasons to Hate LATEX

- 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

Online

- Cons:
    - Slow with long documents

    - Requires many re-uploads of plots & bibliographies

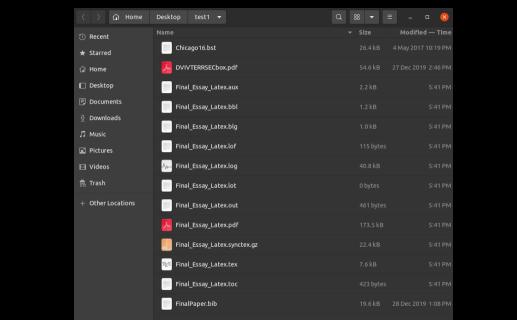   - Depends on the internet

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

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

\usepackage{setspace}

\singlespacing

\begin{document}
    Hello world!
\end{document}
```

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
Final_Essay_Latex.out	461 bytes	5:41 PM
Final_Essay_Latex.pdf	173.5 kB	5:41 PM
Final_Essay_Latex.synctex.gz	22.4 kB	5:41 PM
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 LATEXplugin: https://retorque.re/zotero-better-bibtex/

- R LATEXtable packages : stargazer for summary statistics and regression tables, xtable for pretty much anything else