POIR L#TEX Workshop
Basic `article` style template

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Contents

1 Text and formatting

Lorem ipsum dolor sit amet, **consectetur adipiscing elit**. Praesent volutpat dictum commodo. Mauris dignissim sagittis orci eu viverra. Maecenas sollicitudin libero vel augue blandit hendrerit. `Praesent id blandit orci`. Proin velit mauris, fermentum vitae ornare ut, vulputate et augue. Mauris a eros et velit tempus commodo. In hac habitasse platea dictumst. Suspendisse sodales purus nec nisl dapibus tristique. Suspendisse potenti.

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General advise: Have an easy hand with these formatting options. LATEX is pretty good at selecting size patterns and spacing that is aesthetically pleasing. Especially in the beginning, limit yourself to choosing your paper size, basic font size, and spacing, and let LATEX do the rest.

2 Lists

2.1 Bullet Points

- Point 1.
- Bla bla.
- More bla bla.

2.2 Numbered lists

1. This is the most important.
2. Less important.
3. Even less.

2.3 Nested lists

- Some stuff.
    1. Oh first point.
    2. Second point.
- Back to stuff.

3 Math Symbols

LaTeX has beautiful math typesetting capabilities.[1] We can either write functions and math symbols in text using the $ sign as a wrapper. So for example, if you love Greek letters, you can just write them in text like this $w_{i,t} = \alpha v_{i,t-1} + \beta x_{i,t-1} + \delta_t + \gamma_i + \epsilon_{i,t}$. For longer functions, use the following wrapper:

$$\frac{\partial EU_{ns_p}}{\partial v} = A'(v) - A'(v)(g + v - s - n_L)f\gamma - A(v)f\gamma - B'(v) \leq 0\gamma - B''(v) \tag{1}$$

$$\frac{\partial^2 EU_{ns_p}}{\partial v^2} = A''(v) - A''(v)(g + v - s - n_L)f\gamma - A'(v)f\gamma - A'(v)f\gamma - B''(v) \tag{2}$$

4 Figures

LaTeX puts figures and tables into so-called **floats**. Floats are containers for content that cannot be broken over a page. The algorithm determines the optimal placement of the float on the page and the text around it. This is a blessing and a curse. Floats are one of the reason that make LaTeX documents pretty. But trying to force LaTeX to place a figure in a position it does not deem optimal can be a hassle. Notice how Figure 1 changes position as we add and remove content from our document.
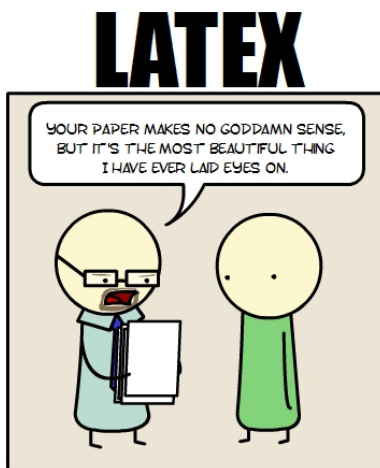

Figure 1: Source http://bit.ly/25VwZaG.

There are some ways to "friendly force" LaTeX to comply with your wishes, such as the commands `h` (here), `t` (top), `b` (bottom), and `p` (page), as well as the infamous `!` (no, really!). LaTeX may or may not comply with your wishes. There are ways to truly force specific positions on the program, but we will not cover this here.

5 Tables

Programming tables in LaTeX from scratch is not straightforward. Examine the code below to understand the basic logic. The `tabular` is wrapped into a `table` float. Then follows a formatting operator, which tells the program to center the tabular on within the float. Upon initializing the tabular, we tell LaTeX how many columns there are (3), that they should be right (r), center (c), and center (c) oriented, and that we want vertical lines (|). We then include the body of each row, with the `&` symbol delimiting the content for each cell. Below, see the code that is used to create Table 1.

---

[1] For a list of the most common math symbols, see http://web.ift.uib.no/Teori/KURS/WRK/TeX/symALL.html.

```
\begin{table}[!htbp]
  \centering
  \caption{The classic ``Prisoner's Dilemma"}
    \begin{tabular}{|r|c|c|}
    \hline
    {\bf Player I / Player II} & Cooperate & Defect \\
    \hline
    Cooperate & (5,5) & (-10, 10) \\
    \hline
    Defect & (10,-10) & (-5,-5) \\
    \hline
    \end{tabular}
  \label{tab_prison}
\end{table}
```

Table 1: The classic "Prisoner's Dilemma"

Player I / Player II	Cooperate	Defect
Cooperate	(5,5)	(-10, 10)
Defect	(10,-10)	(-5,-5)

Fortunately, there are a number of tools that make it much easier to create tables in LaTeX. For example, Table 2 was created using the `stargazer` package in R and imported into the LaTeX document using the `input` command. A similar output can be achieved using the `estaout` in Stata.

Table 2: Table created with R's stargazer package.

	Dependent variable:	
	Internet Users	Life Expectancy
	(1)	(2)
Polity Score	0.0842***	
	(0.0202)	
Population	0.0000	
	(0.0000)	
GDP p.c.	0.0010***	0.0005***
	(0.00002)	(0.00001)
Constant	5.9550***	62.5757***
	(0.4082)	(0.1602)
Observations	3,003	4,111
R^2	0.3839	0.3343
Adjusted R^2	0.3833	0.3341
Residual Std. Error	17.9527 (df = 2999)	8.6253 (df = 4109)
Note:		*p<0.1; **p<0.05; ***p<0.01

To manually create tables, you can use online generators, for example http://www.tablesgenerator.com.

[Paste code generated with tablesgenerator here].

6 Bibliographic Data

One of the greatest things about using LaTeX is the integration of bibliographies. Including citations into your documents is easy. First, you specify the desired citation format. There is a large number of citation

styles out there, including the most common styles used by academic journals. When you need to change the citation format for submission to a journal, just download the respective style file and adjust the `bibliographystyle` parameter. Second, you specify the `.bib` to draw the bibliography from using the `bibliography` command. I use BibDesk as a citation manager that automatically creates the `.bib` file, but there are many other options.

```
\bibliographystyle{chicago}
\bibliography{/Users/thereseanders/Documents/UNI/USC/Resources/Latex/LaTeXWorkshop/sample_bib.bib}
```

In this example we use the `natabib` package for citation management. For more information, see https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management#Bibliography_styles. Here is an overview over the most common `natbib` commands:

```
\citet{jon90}          -->      Jones et al. (1990)
\citet[chap. 2]{jon90}      -->      Jones et al. (1990, chap. 2)
\citep{jon90}       -->

(Jones et al., 1990)
\citep[chap. 2]{jon90}      -->      (Jones et al., 1990, chap. 2)
\citep[see][]{jon90}       -->      (see Jones et al., 1990)
\citep[see][chap. 2]{jon90}      -->      (see Jones et al., 1990, chap. 2)
\citet*{jon90}       -->     Jones, Baker, and Williams (1990)
\citep*{jon90}       -->     (Jones, Baker, and Williams, 1990)
```

Now, if you want to put the Waltzs and the Vasquezs of the world into conversation with each other, you can! But does any of this matter when, really, its all about institutions (Keohane, 2005)? As Risse (2000) says, "Let's argue!"

References

Keohane, R. O. (2005). *After Hegemony: Cooperation and Discord in the World Political Economy* (2nd ed.). Princeton University Press.

Risse, T. (2000). "Let's Argue!": Communicative Action in World Politics. *International Organization 54*(1), 1–39.

Vasquez, J. A. (1997). The realist paradigm and degenerative versus progressive research programs: An appraisal of neotraditional research on waltz's balancing proposition. *American Political Science Review 91*(4), 899–912.

Waltz, K. N. (1979). *Theory of International Politics*. Boston etc.: McGraw-Hill.