

# **L<sup>A</sup>T<sub>E</sub>X for Economics and Business Administration (Part II)**

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# Previously

- Pros and cons of L<sup>A</sup>T<sub>E</sub>X
- Why bother with learning L<sup>A</sup>T<sub>E</sub>X
  - for consistent/structured lay-out
  - better automation of workflow
- Compiling, referencing, formula's, text control

# This session we look at

- Packages (controlling the preamble)
- Figures (how to insert them?)
- Tables (inserting plain tables)
- Automatizing tables (complex tables)
- Better looking references
- Making slides

Note: we will only touch upon these subjects

# The use of packages

- Typically, packages are used to change appearance
- To ensure no errors, usually opt for the full installation or have access to internet
- There are lots of them, see [CTAN](#)
- Often used packages
  - amsmath, graphicx, subfig, marvosym, microtype, booktabs, lipsum, pdfscape, fullpage, natbib
- format:

```
1 \usepackage[colorlinks=true,citecolor=magenta,  
2 urlcolor=magenta]{hyperref}
```

# The use of classes

- Typically one uses the `article` class
- However, there is as well a `book`, `minimal`, `report`, `beamer` class etcetera
- Specific user written classes are `memoir` and `elsarticle` classes
- Classes come with options such as

```
1 \documentclass[12pt, a4paper]{article}
```

# General structure

```
1 \documentclass[twocolumn, a4paper]{article}
2 % Preamble: how should it look like
3 \usepackage{multicol, lipsum}
4 \usepackage[english, german]{babel}
5 \begin{document}
6     % Body: the real contents
7     \lipsum
8 \end{document}
9
```

# natbib & biblatex

Default format is BibTeX—customizable (however limited)—defaults is good (except: use natbib!)

If you want to customize quite a lot: biblatex package!

```
1 \usepackage[style= authoryear-icomp,  
2     backend=bibtex,  
3     natbib=true,  
4     firstinits=true,  
5     backref=true,  
6     maxnames=2,  
7     maxbibnames=10]  
8     {biblatex}
```

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# Slides

Slides are typically made with the beamer class

```
1 \documentclass{beamer}
2 \title{Another lecture}
3 \author{By a wisecrack lecturer}
4
5 \begin{document}
6   \frame{\titlepage}
7
8   \begin{frame}{Introduction}
9     %           Typically a quote from a long
10    %           dead philosopher that should
11    %           make the lecturer look smart
12    %           but usually does not.
13   \end{frame}
14 \end{document}
```

# Beamer style

You can change the beamer style by:

```
1 \usetheme{Hannover}
2 \usecolortheme{dove}
3
4 % to remove those navigation symbols
5 \beamertemplatenavigationsymbolempty
6
```

(<https://www.hartwork.org/beamer-theme-matrix/> gives all possible combinations)

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