Methods Training
Scholarship, Posters and Thesis
(English)

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Spring 2018

Day	Date	Session	Topic
1	13-02-2019	Morning (9:00 − 12:00)	Introduction
1	13-02-2019	Morning	Scholarship and research
1	13-02-2019	Morning	Taking notes
1	13-02-2019	Afternoon (13:00 − 15:30)	Posters
1	13-02-2019	Afternoon	Intro to Linux, desktop, command line
1	13-02-2019	Afternoon (15:30 − 18:00)	Personal working time (poster)
2	14-02-2019	Morning	Citations
2	14-02-2019	Morning	Literature searching and bibtex files
2	14-02-2019	Morning	Reference management (Citavi and Jabref)
2	14-02-2019	Afternoon	Inkscape & (Python3 ?)
2	14-02-2019	Afternoon	Personal working time (poster)
3	15-02-2019	Morning	Research questions and hypotheses
3	15-02-2019	Morning	Writing your thesis and personal time line
3	15-02-2019	Morning	FAQ thesis, LaTeX
3	15-02-2019	Afternoon	Personal working time (poster)
	17-02-2019	Night (21:00)	Final PDF uploaded to LEA
4	18-02-2019	Morning 9:00	Poster PDF must be delivered to printshop
4	18-02-2019	Morning (1 hr)	Git
4	18-02-2019	Morning 10:00	Library seminar
4	18-02-2019	Afternoon	Significant figures and rounding
4	18-02-2019	Afternoon	Personal working time
5	19-02-2019	Morning	Ethics
5	19-02-2019	Morning	Course evaluations
5	19-02-2019	Afternoon	Poster presentation
	??-??-2019	08:00-11:00	Poster Session at the Niehl training center

Questions or comments from last lecture(s)?

German and English Thesis Examples and Template:
https://gitlab.com/k.n.kirschner/H-BRS_Thesis_Template.git

FAQ About Thesis:
LEA → EMT-Studieninfos → Prufüngen → FAQ →
Häufige Fragen zu Prüfungsangelegenheiten →
Prüfungsinformationen für alle EMT-Studiengänge: →
Fragen zur Abschulssarbeit und zum Kolloquim

Bib-Cloud – https://www.h-brs.de/en/bib/cloud-storage-keep-your-files-safe-bibcloud

Photo by Mario Purisic on Unsplash

LaTeX and writing

or

How to make professional-*looking* documents
(i.e. the content is up to you)

LaTeX and writing

LaTeX

- Typesetting journal articles, technical reports, books, and slide presentations.

- Control over large documents containing sectioning, cross-references, tables and figures.

- Typesetting of complex mathematical formulas.

- Automatic generation of bibliographies and indexes.

Online Guide: `https://en.wikibooks.org/wiki/LaTeX`

Overview

- Structure of a LATEX document

- Displaying Text
  - bold, italics, subscripts
  - centering, raggedleft
  - lists
  - verbatim
  - boxes
  - tables

- Typesetting mathematical formulas.

- Figures and Tables (floats)
- Bibliographies and indexes.

Online Guide: `https://en.wikibooks.org/wiki/LaTeX`

Overall basic structure

01_example_simple.tex:

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

\title{The Best Thesis Title Ever}
\author{Jane Doe}
\date{September 2019}

\begin{document}

    \maketitle

    Hello scholarly world!

\end{document}
```

The latex project. https://www.latex-project.org/about.
Accessed November 27th, 2017

Example: Using Packages

02_example_usepackage.tex:

```latex
\documentclass{article}

\usepackage{lipsum} % generates Lorem lpsum dummy text

\title{The Best Thesis Title Ever}
\author{Jane Doe}
\date{\today}

\begin{document}

   \maketitle
   \lipsum[1-3] % first 3 paragraphs of lipsum

\end{document}
```

Sections and Paragraphs

03_sections_paragraphs.tex

```
\section{}
\subsection{}
\subsubsection{}

\paragraph{}
\subparagraph{}
```

Font Effects

04_font_effects.tex

```
Bold: \textbf{Lorem ipsum dolor sit amet}
Underline: \underline{Lorem ipsum dolor sit amet}
Italics: \textit{Lorem ipsum dolor sit amet}
Slanted: \textsl{Lorem ipsum dolor sit amet}
Emphasis: \emph{Lorem ipsum dolor sit amet}
Small Caps: \textsc{Lorem ipsum dolor sit amet}
Teletype: \texttt{Lorem ipsum dolor sit amet}
Sans Serif: \textsf{Lorem ipsum dolor sit amet}
Roman Words: \textrm{Lorem ipsum dolor sit amet}
```

Font Effects

04_font_effects.tex and

` (grave accent): à

´ (acute accent): á

^ (circumflex or "hat"): â

¨ (umlaut or dieresis): ä

~ (tilde or "squiggle"): ã

¯ (macron or "bar"): ā

˙ (dot accent): ȧ

˘ (breve accent): ă

ˇ (háček or "check"): ǎ

˝ (long Hungarian umlaut): ő

German rules and fonts

05_font_labels_ngerman.tex

Citing and Cross Referencing

06_example_citing_crossref.tex

```
\cite
\bibliographystyle{abbrv}
\bibliography{bibtex_examples}

\label{marker}
\ref{marker}
\pageref{marker}
```

Large documents: Include statement

07_example_include_files.tex

Let's say you have a main LaTeX document and then separate ones for chapters:

- main.tex
- chapter_1.tex
- chapter_2.tex
- chapter_3.tex

main.tex:

```
\include{chapter_1}
\include{chapter_2}
\include{chapter_3}
```

Example: Math

08_example_math.tex

Example: Verbatim

09_example_verbatim.tex

Example: Figures

10_example_figures.tex

Example: Tables

11_example_tables.tex

Helpful Misc. Files

```
fontsizes: \tiny, \scriptsize, \footnotesize, \small,
           \normalsize, \large, \Large, \LARGE,
           \huge, \Huge
            e.g. {\Huge test test}
\vfill, \hfill
\noindent
\smallskip, \medskip and \bigskip
\vspace{}, \hspace{}
\clearpage
```

Tips on making a LaTeX table

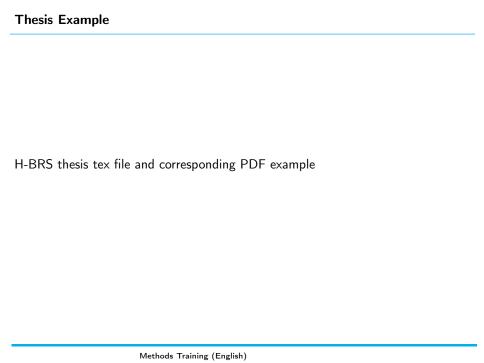Do everything necessary within a spreadsheet

- Save the spreadsheet in the program's native format (preserves formulas)

- Make sure you don't use "&" or mark it with as "\&"

- Save as (or Export) as a csv formatted file
    - Field delimiter = &
    - Text delimiter = (nothing)

- add "\\" to end of lines

For Linux command line users
If you have the data already in a csv file (using commas)

- csv2latex filename.csv > newname.csv

Example

```
\begin{table}[h!]
  \centering
  \caption{Example of a simple table.}
  \label{tab:example1}
  \normalsize  %% fontsize for table
  \begin{tabular}{l|cr}
      NAME 1 \& NAME 2&ITEM&VALUE \\
      Test \& Example 1&Item 1&Value 1 \\
      Test \& Example 2&Item 2&Value 2 \\
      Test \& Example 3&Item 3&Value 3 \\
  \end{tabular}
\end{table}
```

Thesis Example

H-BRS thesis tex file and corresponding PDF example

[1] The latex project. https://www.latex-project.org/about. Accessed November 27th, 2017.