Writing Theses in LaTeX: Task Sheet

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1 Creating a document

- Create a new project called in Overleaf named "Thesis" (or create a new project using whatever editor you prefer)
- Delete any sample text in the document
- Create a new report document
- Select a fontsize (12pt)
- Select the Helvetica font
- Select the type of page you want to write on (A4)
- Make the document double-sided
- Set the margins such that they are over 1cm
- Test how it looks with some blindtext or other nonsense text

2 Line Spacing

- Use the "linespread" command to make the spacing for document 1.5 or 2 times
- Include a section of document with single line spacing
- Include a footnote with single-lined spacing

3 Title Page

- Make a title page
- Make sure you include the required information
- Make it aesthetically pleasing to you

4 Statements and Abstract

- Add one statement and an abstract after your title page
- You can use \chapter* to give your Abstract a title too
- Include at least one signature (you can use any image as a placeholder)
- Use blindtext or other placeholder text for the content

5 Contents and Appendices

- Add some chapters, appendices sections and sub-sections to your document
- Add some tables and figures to your document
- Give at least one table or figure a short caption
- Add a table of contents, list of figures and list of tables to your document

6 Splitting Your Document

- Put the content for each chapter and appendix in a different .tex file
- Use the "include" command to include each document in your thesis.tex file
- Experiment using the "includeonly" command to only compile some of your chapters

7 Hyperlinks

- Use the "hyperref" package to make your references dynamic hyperlinks
- Experiment with different colours for your links and choose one you like

8 Subfigures

- Find some pictures you like online (or use some from your research)
- Place them in your project (click upload in the top-left of the Overleaf interface)
- Insert a subfigure into your document
- Give each subfigure a caption and a label
- Give the figure a caption and a label
- Reference the figure and a subfigure in some text

9 Graphics Path

- Create a different directory for each chapter of your thesis
- Move your figures into the relevant directory
- Set the graphicspath so it includes each of these directories

10 Custom Commands

- Create a custom command for a phrase you expect to often in your thesis
- Create a custom command for a mathematical expression. It should take at least one argument.
- Use both custom commands in your document

11 Bibliography Management

- Create a .bib file
  - If you use a reference management software, ask it to export your reference library as a .bib file
  - Otherwise, make up a few references by hand
- Cite a few of your references in your text
- Use “citet’, “citep” and, at least once, cite multiple references in a single command
- Choose a referencing style you like

12 Acronyms

- Define some acronyms relevant to your topic
- Use each acronym at least twice each in some sample text

13 Aligning Equations

- Define an alignat environment with at least three equations
- Use at least one alignment point each equation to cause them to line up