Step-by-Step Guide for Your Master's Thesis

The following notes provide you with some general guidelines on how to organize and write your master thesis. Nevertheless, we strongly recommend to also consult your supervisors before filling your intended structure with content. This applies in particular for theses with a strong modelling, mathematical, or computer science focus, which might benefit from a different organization as e.g. suggested by the corresponding journals in the field.

We also recommend to ask in your lab about useful tools, i.e. word processors (e.g. OpenOffice), graphics tools (e.g. Inkscape/Gimp), or reference managers (e.g. Zotero), preferably open source and available for different operating systems. LaTeX/Overleaf might be an option for those keen on equations and mathematical content.

Formalities
- Font size 12, line spacing 1.5 (to allow your supervisors making notes during review)
- Language: English

Title Page:
Use the template provided for the M.Sc. in Neurosciences.
Include the following information:

- Title of your thesis
- Your name
- Department and institute
- Matriculation number
- First supervisor
- Second supervisor
- Date of submission

Abstract/Summary:
Provide a concise summary of your research, including the research question, methods, key findings, and conclusions (maximum 1 page).

Introduction:
Introduce the topic and outline the research question. Provide a brief overview of the thesis structure. Describe the state of the art in your research field, including all necessary background information to understand the main part of your thesis. Make sure to cite both contemporary literature and classical works. Conclude with the objectives of your thesis, state here the aims of your study, the research questions you intend to answer, and the hypotheses you are testing.

Materials & Methods:

Describe the experimental or observational methods used in your research, including any equipment, software, model, mathematical framework, or protocols. Ensure that your description is detailed enough to allow others to reproduce your experiments. Provide comprehensive information on the statistical analyses used.

Results:

Present your findings using text, tables, and figures. Ensure that your data is clearly presented and logically organized. Use concise annotations, labels, and do not forget physical units where applicable. Wherever possible, use line art drawings instead of bitmaps, since line art can be scaled nicely and edited easily if you want to make changes. Include legends for all figures and tables. Highlight important trends and findings, but keep the legend short and refer to details in the text.

Discussion:

Interpret your results, discussing their implications, limitations, and how they relate to existing research.

Conclusion:

Summarize your key findings and suggest directions for future research.

References:

List all literature cited in your thesis, following a consistent citation style. We recommend using the citation format from the *Nature Portfolio* (e.g., *Nature Communications*), following the American Psychological Association (APA) guidelines for formatting journal articles, books, book chapters, etc.
References should be cited in the text using sequential numbers in superscript.

Acknowledgements (optional):

Here, you can give credit to the people or funding organizations who supported you during your research.

Supplementary Materials:

Include any additional material, such as raw data, detailed protocols, extended mathematical analyses, or supplementary figures, if necessary.

References

- This sentence cites one reference [1]
- This sentence cites two references [1,2]
- This sentence cites four references [1–4]