

Faculty of Environmental Sciences Institute for Cartography

Guidelines for Writing Theses

1. Structure of the Thesis

Every scientific paper – including your thesis – should be reasoned and logical structured. The significance of each chapter should also be reflected in its length. Ensure that the main chapter is dedicated to the discourse of the main scientific issues and covers most of the thesis. All chapters must not have more than three subchapters. Approximately, your thesis should be structured in the following way:

1. Front Page

including details on the institution (institute and university), the subject of thesis, the Surname of the author, supervisors, and the date of submission

2. Thesis Task Description

The original sheet or a copy has to be bind into the thesis.

3. Statement of Authorship

according to the following wording: "Herewith I declare that I am the sole author of the thesis named "[Titel]" which has been submitted to the study commission of geosciences today. I have fully referenced the ideas and work of others, whether published or un-published. Literal or analogous citations are clearly marked as such. "

The statement of authorship has to be signed in person (including place and date)

4. Abstract

An abstract presents a shPlace and concise summary of the thesis without anticipating any conclusions. It should reflect the essential content of the thesis and should arouse reader's interest. The abstract should not exceed 250 - 300 words.

5. Kurzfassung

a German version of the abstract.

- 6. Index of Contents
- 7. Index of Figures
- 8. p.r.n. Index of Tables

9. Index of Abbreviations

Only uncommon abbreviations should be listed. General abbreviations like e.g. or etc. should be left out!

10. Body of Text

a. Introduction

The introduction should lead to the main issues of the thesis and might be grounded, for instance, on a current occurrence. Furthermore, the introduction should clarify the author's motivation and should define the subject of the thesis in contrast to other papers. An outline of the thesis and possible presupposition should be given.

b. Theoretical Part

The theoretical part includes a literature research. Please limit your research only to relevant literature. Represent the current state of the art regarding the subject of the thesis. Discuss opposed views of authors and scrutinise their arguments.

c. Practical Part

The practical part should represent your own research results, your own research approaches etc. Interpret your work critically. Keep always the subject of the thesis and the reference to the introduction in mind.

11. Conclusions

Summarise your work within the conclusions. The conclusions should be generally intelligible. Explain abbreviations again. Do not take up new ideas. Assess your work and emphasise your own position. Clarify open research questions and give an outlook on further researches and developments.

12. References

Quote all references which you have used or cited. The list of references has to be complete. Arrange the list in alphabetical order by the lead authors. Remind yourself that the references give some indication of your dedication towards this thesis. Please find additional information in chapter 4.

13. Appendix

Additional figures, tables, diagrams, or source codes which contribute to the understanding of the thesis should be attached. An index of appendices should be added if several appendices are attached. Figures, tables, diagrams etc. which disturb the flow of reading rather be attached to the appendix.

2. Design of the Thesis

Usually, scientific papers are written by use of LaTeX, but do not waste time in getting to know this programme. Well-established text processing programmes like MS Word are suitable as well. Take care of the thesis' optical appearance and the quality of the figures. Remind yourself that you are enrolled in a course of study which demands aesthetics.

Template

A MS Word template is available on the homepage of the Institute for Cartography. In addition, MS Word and LaTeX templates for academic papers are also available on the homepage of TU Dresden: http://tu-dresden.de/service/cd/4_publikationen/index.html

In other circumstances, take care of the following page limits:

left: 4 cm top: 3 cm right: 2 cm bottom: 3 cm

Continuous Text

Choose a font with serifs like Sabon or Times New Roman for continuous text passages instead of one without serifs. Do not use more than 3 different fonts in the thesis. Choose a font size of 11 or 12 pt and 1.5 line spacing. Use full justification and hyphenation on continuous text passages.

Highlight paragraphs with the use of blank lines or apply an offset on the first line of each new paragraph (max 1 cm). However, stick to one option throughout the entire thesis.

Figures

All figures have to be generally intelligible and have to represent the basic essentials. Pay attention to the quality (300dpi). Each figure needs a caption and a reference in the index of figures. Number the figure consecutively according to the main chapter (e.g. Fig. 1.2 ...). Each figure has to be referenced within the text. Figures have to be placed nearby the text passage which references the figure. If you compare figure, please ensure equal scales. All figures which are taken from other sources have to be referenced as such (Author, Year of publication). All changes of original figures have to be referenced as well. Reference these figures as "after Author (Year)".

Tables

Alike figures, each table needs to be captioned and numbered. Reference all tables in the index of tables. Number the tables consecutively according to the main chapter (e.g. Tab. 1.2 ...). Units have to be mentioned in head of the table. Use an uniform design for all tables in the thesis.

Formula

Use equal variables throughout the entire text. If a new variable is mentioned for the first time, the variable has to be declared. Formula symbols have to be italicised, units normal. Numbers and units have to separated by blank spaces but avoid line beaks. Use non-breaking spaces. Number formulas consecutively.

3. Language

Write the thesis concisely as possible. Avoid long convoluted sentences and grandiloquent phrases as well as enumerations of terms. In addition, vulgar and colloquial expressions have to be avoided. Take care of a reasonable linguistic style and appropriate words. It is advisable to read classical literature before writing. Grammatical and spelling errors should be minimized. This is especially true for the correct spelling of technical terms. Pay attention to word repetitions. Let different people, even non-specialists, read more than once your thesis. Use English terminology. Foreign language terms should only be used when there are no matching English translations. Write the thesis in a neutral form. Do not write in the first person. This is uncommon for scientific papers. Rather use passive forms, infinitives or in exceptional cases "the author ...". Reformulate sentences when necessary. If you use abbreviations, spell the terms of abbreviations in full when they are mentioned for the first in the text and specify the abbreviations in brackets. Only the abbreviations can be used in the following text.

4. Quotations and References

Everything you have taken from other sources and applied to your own work has to be referenced as such. If possible, avoid literally quotations and try to describe the context analogously. If you quote literally, indicate it. If particular words are omitted in a literal quotation, it can be indicated by "...". If omitting whole sentences, please indicate those by "(...)". Changes in literal quotations are written in square brackets.

For instance: «(...) Der zeitdiagnostische Rückblick auf das kurze 20. Jahrhundert versucht, die gegenwärtig verbreitete Stimmung aufgeklärter Ratlosigkeit [in Mitteleuropa] zu erklären.» (Habermas 1998, p. 7)

However, you should only cite sources that you have seen yourself! Be extremely critical concerning web sources such as Wikipedia. Instead of them, quote scientific textbooks and publications.

Use the bibliography management assistance in MS Word, in order to avoid a manual post-processing. There is also a free bibliography management software available - Citavi (http://www.citavi.com/de/).

Within the text, the sources have to be referenced by the author/s, year of publication and the page number(s). Consecutively numbered references, such as [1] should not be uses!

- One author: Author (year, p.r.n. (page or pages))
- two authors: Author1 and Author2 (year, p.r.n. (page or pages))
- several authors: Author1 et al. (year, p.r.n. <page or pages>)

e.g.: Context models are presented for example by NIVALA & SARJAKOSKI (2003), REICHENBACHER (2004) and KJELDSKOV et al. (2005).

The references in the reference list are arranged alphabetically by the surname of the first author. Always specify the pages in magazines etc. For internet sources, the infor-

mation of the last access is required. The references should specify as in the following section. Use the citation style of the Cartographic Journal.

Textbooks

Given name Surname of the 1st author [, Given name Surname of the other authors]. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication (p.r.n. with subtitle)', in *Title of publication (p.r.n. with subtitle)*, ed. by Given name Surname of the 1st editor [, Given name Surname of the other editors], [Circulation (from the 2nd on),] Pages, Publishing company, Printing place(s). [ISBN]

Example:

PJ Bartie, S Mills and S Kingham. (2008). 'An egocentric urban viewshed: a method for landmark visibility mapping for pedestrian location based services', in *Geospatial Vision: New Dimensions in Cartography*, ed. by A Moore and I Drecki, pp. 61–85, Springer, Berlin.

Journal Publications

Given name Surname of the 1st author [, Given name Surname of the other authors]. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication (p.r.n. with subtitle)', *Title of journal*, Volume, Pages. [ISSN]

Example:

IN Gregory and D Cooper. (2009). 'Thomas Gray, Samuel Taylor Coleridge and geographical information systems: a literary GIS of two Lake District tours', *International Journal of Humanities and Arts Computing*, 3, pp. 61–84.

Academic Theses

Given name Surname of the author. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication (p.r.n. with subtitle)'. Type of thesis {Master thesis, Doctoral thesis, ...}. University. [Place.]

Example:

KS Pearson. (1978). 'Lithographic Maps in the Nineteenth Century Geographical Journals'. Ph.D. thesis. University of Wisconsin-Madison.

Conference Proceedings

Given name Surname of the 1st author [, Given name Surname of the other authors]. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication (p.r.n. with subtitle)', in *Conference name*, Place, Date of the conference [, Pages].

Example:

L Møller-Jensen and EJ Hansen. (2007). 'Towards a Mobile Tourist Information System: Identifying Zones of Information Relevance', in *10th AGILE International Conference on Geographic Information Science 2007*, Aalborg, May 8–11.

Internet Sources

Given name Surname of the 1st author [, Given name Surname of the other authors]. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication' [Status], URL (Date of last access).

Example:

I Jacet. (2007). 'Nesserland' [online], http://www.inejacet.nl/interviews.html (accessed 24 October 2008).

,Grey' Literature

Given name Surname of the 1st author [, Given name Surname of the other authors]. (Year of publication, p.r.n. use additional lower case letters for several publications in that year). 'Title of publication (p.r.n. with subtitle)'. Type of publication {Report, ...}. Institution. Place.

Example:

A Smith. (1988). 'Colour photomapping'. RepPlace NRC-01- 512. National Research Centre. Ottawa, Canada.

5. Submission of the Thesis in Printed and Digital From

Please submit **three** printed copies of the thesis. In addition, each copy is accompanied by a CD with the digital version of the text and the practical results. A poster of the main results of the thesis has to be submitted as well. An Adobe Illustrator poster template can be found on the website of the institute.

http://kartographie.geo.tu-

dresden.de/.files/postervorlage2011_70x100cm.ai?l=ger&sub=3%27

To adapt the poster to your content, we emphasis to use the poster design application: http://wwwpub.zih.tu-dresden.de/~kpippig/publish.htm