

Revised guidelines for the writing of master's theses
Master's Program Geosciences and Marine Geosciences Faculty of Geosciences,
University of Bremen

(Resolution of the Master Examination Board of 03.June 2013)

The following guidelines are intended to serve as a guide – for students while writing, and for lecturers while supervising Master's theses. They are not meant to replace the examination regulations. Reference is also made to the evaluation sheet for Master's theses (see <http://www.geo.uni-bremen.de/page.php?pageid=289>).

The duration of a master thesis is 22 weeks. After a relatively short preparation phase, the experimental part and the documentation of the results require approximately the same amount of time. Due to the research seminar preceding the master thesis, a project outline (topic and time schedule) is required/should be available at the beginning of the thesis.

The total scope of the Master's thesis has to be appropriate to the topic and agreed with the supervisor. Master's theses in general should not exceed 80 pages (DIN A4, without appendix). This requirement is based on a font size of 11 or 12 points and 1.5-fold line spacing. The text can be left-aligned or justified. The thesis can be written in German or English. Three bound copies and one version on CD must be handed in at the administrative office.

The general structure of the thesis follows the conventions of excellent scientific practice:

Cover Page

Title

Master's thesis in the degree course

Geosciences/Marine Geosciences Faculty of Geosciences

University of Bremen

written by

Name,

Bremen, Year

Names of the consultant and, if applicable, the additional supervisor

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Table of content

Summary

Concise outline of the content of the work. The abstract should include information on the research question, methodology, material and results as well as the main conclusions.

Introduction

In the introduction, the motivation for the present scientific work should be explained. This includes a brief information about the current state of research (based on literature), from which clearly defined scientific question(s) are deduced. Finally, the approach to the research question should be explained.

At the end of the introduction, the reader should be clear about the following:

1. What is the scientific question of the paper?
2. Why is this question of interest?
3. What strategy is used to achieve the aim of the thesis?

If not mentioned elsewhere, the working group in which the master thesis was conducted should be mentioned in this section.

Material und methods

In this section, the methods used (possibly also the selection criteria) and the sample material on which the work is based are described in as much detail and as accurately and concisely as possible (e.g. by using flowcharts). A broad repetition of textbook knowledge should be avoided. (About 25% of the total scope).

Results

Detailed description of your own results, as far as they are relevant for the following discussion. Lengthy formulations should be avoided and replaced by the use of graphics and tables (raw data are documented in the appendix). Graphics should be designed to be self-explanatory and presented in an appropriate size. Each graph and table should be accompanied by an explanation. This section should - if possible - also include an error analysis. (About 25% of the total scope.)

Discussion

The discussion of one's own results is the central and decisive part of the thesis! Here, your own results are evaluated and interpreted in the context of other work in relation to the scientific question. (About 30% of the total scope.)

Conclusions

This section should summarize the results of the previous scientific discussion. The conclusions resulting from this scientific work should be clearly stated afterwards. A specific, non-trivial ("more data") outlook may also be appropriate at this point.

Literature

An elementary component of a scientific paper is to evaluate one's own results in the context of the existing literature. This includes clearly citing and thus appreciating the work used:

Examples of entries in the literature list:

Journal article (one author): Berger, A., 1992. Astronomical theory of paleoclimates and the last glacial- interglacial cycle. *Quaternary Science Reviews*, 11: 571-581.

Journal articles (several authors): Hay, W.W., Shaw, C.A. und Wold, C.N., 1989. Mass-balanced paleogeographic reconstructions. *Geologische Rundschau*, 78: 207-242.

Book chapters:

Schreiber, B.C., 1986. Arid shorelines and evaporites. In: H.G. Reading (Hrsg.), *Sedimentary environments and facies*. Oxford, Blackwell Sci. Pub., 189-228.

Book:

Pettijohn, F.J., Potter, P.E. und Siever, R., 1987. *Sand and sandstone*. Berlin, Springer, 553 S.

Doctoral theses:

Altenbach, A.V., 1992. Verbreitungsmuster benthischer Foraminiferen im Arktischen Ozean und in glazialen und interglazialen Sedimenten des Europäischen Nordmeeres. Doktorarbeit, Univ. Kiel, 111 S.

Appendix

It is part of the practice of excellent scientific work to document data obtained in such a way, that other scientists can follow the results of the work. In the appendix, the measurement data are to be listed, which form the basis of derived quantities and graphical representations. Electronic appendices are useful for documenting extensive data sets (e.g. CD, DVD).

An **acknowledgement** can optionally be inserted between the "Conclusions" and "Literature" sections or after the "Summary" section.

The head of the examination committee

Prof. Dr. Tobias Mörz