

Information on writing reports

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Layout and size

- Space between paper border and text: 2 cm above and below, 2.5 cm right and left
- Space between lines: 1.5 times
- Size of letters e.g. 11 pt for Arial, 12 pt for Times New Roman, the same letter type in the whole report
- The report should contain maximal 15 pages.
- It is preferable to use LaTeX

Title page

- Name of the seminar
- Title of talk
- Name of presenter
- Matrikel number
- Name of docent
- Date of talk

Table of content

- List of all chapters including sections if available
- Table of content should be on the second page
- The table provides only the pages where the chapter/section starts, not where it end.

Introduction

- Description of the aims, topics and problems which are treated
- Description on related approaches in the literature
- Overview of the chapters/sections

The Introduction should be understandable without reading the whole report.

Statistische Methoden

- Description of statistical foundations, of the methods, of the models etc., possibly in several chapters oder sections
- Discussion of used assumptions, properties, advantages and disadvantages
- Random variables should be written with capital letter, realisations by small letters
- Use consistent notation in the whole report

Special chapters with own titles

For example:

- Comparison of methods using
- Analysis of the behaviour of method ... in situation ...
- Example on ...

Example(s)

- Relationship to the considered problem
- Description of the data or the simulation
- Presentation of the results of the statistical methods
- Interpretation of the results

The steps of the simulation, the analysis, and the results must be presented in complete sentences so that somebody else can repeat the simulation and the analysis.

The used models and methods should be given by formulas where all symbols are defined.

Summary

- Short description of the main topics and results
- Critical discussion of the methods and results and conclusion including warning about missinterpretation
- Outlook: open problems, possible extensions, etc.

The summary must be understandable without reading the whole report, as the introduction.

Appendix

- Additional tables, figures and potentially further definitions, theorems, proofs
- It should only contain tables, figures etc. which are not of high importance for the topic or which would interrupt too much the text.
- The appendix should be structured as the main text with chapters/sections and page numbers
- The chapters should be denoted by A, B,... and should appear together with the sections in the table of content

List of references

- List of all books, journal papers, software packages, online sources which have been used
- The list should be ordered alphabetically
- The sources should be of scientific quality (Wikipedia can be only used to find scientific sources)
- The following form of the references should be used:

Form of references in reference list:

- Books:

Büning, H. Trenkler, G. (1994). *Nichtparametrische statistische Methoden*, de Gruyter, Berlin.

- Journal papers:

Hössjer, O., Rousseeuw, P.J., Croux, C. (1994). Asymptotics of the Repeated Median Slope Estimator, *The Annals of Statistics*, **22** (3), 1478-1501.

Referencing

- All references of the reference list must appear in the text.
- Form of references in the text:
 - (Author, Year) or Author (Year)
 - If there two authors, then both should be given. If there are more than two authors, then (Author 1 et al., Year) or Author 1 et al. (Year)
 - If there are more than two sources of one author of one year, then then distinguish between the year by e.g. (2002a), (2002b)
 - If something from a book is used, then the page or the chapter should be added.

Example of referencing

- This can be checked with the Wilcoxon sign test (Büning and Trenkler, 1994, pp. 96)
- Hössjer et al. (1994) describe the asymptotic behaviour of ...

Software

- All used software must be cited.
- R must be cited as provided by R.

Figures and Tables

- All figures and tables need to have a caption with a number, e.g. „Fig. 1.1: Title/explanation“ or „Tab. 1.1: Title/explanation“
- All figures and tables of the appendix need to have a caption number as well, e.g. „Fig. A.1: Title/explanation“ or „Tab. A.1: Title/explanation“
- The figures and tables together with their captions should be understandable without reading the whole text
- Not all figures and tables have to be included in the main text. Some could be given in the appendix.
- However, the main text should refer to all figures and tables including those of the appendix as e.g. „see Fig. 1.1“.

General hints

- Use a scientific, precise language and provide arguments from the literature and not your opinion. Let the mathematics and statistics speak for the topic.
- Word by word citations should be quoted as e.g.:
 Note that already Author1 (Year) wrote „The result“
and should be not too long. It is not allowed to copy long text!