



Explanation of the evaluation scheme for student theses

General

- Any grade that is worse than 1.0 needs to be justified with a short remark.
- The weights in column D are suggestions. Supervisor and examiner may change these. That can be useful, if one aspect was extraordinarily good (>100%) so that it may compensate for weaker parts of the thesis.

Goals

- In this block, it is checked, whether the goals of the work have been achieved. Goals are formulated at the beginning when the student starts working on the topic and are written down on the form `paperwork/Zielvereinbarung für Studentenarbeiten.docx`.
- Use weights to emphasize the importance of individual goals.
- The decision whether a goal is achieved is binary (1 or 0). If a goal is reached only partly, then this can be taken into account in the lower part „Thesis content“ -> „Student's contribution“
- Goals and weights may change later, if everyone agrees.
- The sum of all achieved goals is the basis for the final grade.
- A total achievement rate of 50% means that the student can at best get a grade of 4.0.

Methods of working

Independence in research

- Did the student try to solve problems by him/herself before asking the supervisor?
- Did the student ask the same questions over and over again?
- Did the student develop own ideas and solutions?

Independence in writing

- Did the student need a lot of help in writing?
- Did the student's texts (zeros version or final version) contain spelling errors, wrong grammar?
- Is the formatting acceptable?
- Ideally, the supervisor should be able to focus on the content, when proofreading text from the student.

Scientific diligence (documentation, reproducibility, honesty)

- Did the student question the results critically?
- Did the student program such that other can run and understand the code? Is the code well documented/commented?
- Are the student's results reproducible?

Openness to advice from supervisor

- Did the student inform the supervisor about the current state of the work on a regular basis?
- Did the student keep to agreements between supervisor and student?
- Did the student implement the suggestions from the supervisor?
- This section should only give a grade worse than 1.0, if a lack of openness caused more work of the supervisor.

Thesis content

Structure/Outline

- Does the order of the chapters make sense?
- Is the outline comprehensible?

Introduction

- Is the topic well motivated?
- Are goals and hypothesis clearly defined?

Background/Fundamentals

- Are the fundamentals complete?
- Are the fundamentals correct?
- Are the fundamentals reduced to the minimum (no need to explain things that are not used later on)?

Student's contribution

- Are all goals achieved completely?
- Are the student's contributions clearly separated from the state of the art/fundamentals
- Are the results presented and discussed in a comprehensible and coherent manner?
- Are the figures and tables helpful for the understanding of the results?

Conclusion

- Do the discussion and summary refer back to the goals/hypotheses in the introduction?
- Are the results boiled down to the most important conclusions?

Thesis - formal aspects

Citations

- Are thoughts from other and literal quotes marked as such?
- Is the bibliography complete and consistent?

Spelling/Grammar

- Are spelling and grammar ok?

Appearance

- Does the layout (figures, tables, equations, chapter headings, margins) make the thesis easy to read?
- Is the printed copy physically intact (creases, pixelated figures, missing pages)?
- Is the formatting consistent (font, font size, figure captions)?
- Is the mathematical notation consistent (same name for the same object)?

Correct use of language

- Is the language precise, brief and comprehensible?
- Are there unnecessary repetitions?
- Are there unnecessarily long sentences that make the text difficult to read?

Presentation

The grade of the presentation is determined by impressions from the group (The supervisor asks the group members individually). The following aspects may help find an appropriate grade:

Slides content

- Are the important parts of the work (motivation, theory, results, conclusions...) presented clearly on the slides?

Outline

- Was the presentation structured well?

Slide layout

- Are all figures labeled? Are all labels readable?
- Is the layout consistent?

Personal style

- Did the student speak in a way that made it easy to follow (appropriate pacing, clear emphasize on important terms...)?

Answers to questions

- Did the student show a good understanding of the topic in the discussion after the presentation?