

Pro gradu thesis evaluation matrix --draft.

11/2017

Three broad areas will be evaluated: i) **Assignment and content of the thesis**, ii) **Structure of the thesis and quality of presentation** and iii) **the Work processes**.

In the evaluation of part i) special emphasis is on

- How the topic of the thesis is presented and how the research goals are justified.
- How the research question is formulated and focused.
- Choice of reference material, its suitability and depth.
- Presentation of results and how they address the goals of the research.
- Quality of research methodology and results.
- Evaluation of the validity and significance of the results.

In the evaluation of part ii) special emphasis is on

- The coherence and focus in the structure of the thesis
- Scientific style of presentation, correctness of the language and overall readability of the text.
- Use of references.
- Use of equations, tables and figures and their quality.

In the evaluation of part iii) special emphasis is on

- Independent and creative thinking during the thesis work.
- Ability to collaborate with the supervisor and (if relevant) with other members of the research team
- How well the planned schedule is implemented.

Each part i)-iii) is evaluated on scale 0-5 (more details on next pages). The criterion for acceptance is that within each category the minimum 1 is achieved. The final grade of the thesis will be the average of the three points.

	0	1	2	3	4	5
i) Assignment and content	Essential elements are missing (e.g. introduction or conclusions). The reference material is absent or it has not been used in an appropriate way. Research topic is vague or severely misunderstood.	Research topic is narrowly described and the linking of the research goals with the wider background is insufficient. The references used are limited and the overall dependence of the text on the references is obvious. The work shows limited or incorrect understanding of the thesis topic.		The topic of the thesis and the research goals are presented robustly. Research methods and materials are sufficient and correctly used. Presentation of results is acceptable. Conclusions and outlook show that the student is familiar with the research topic.		The topic of the thesis, research goals and questions and research methods are well presented. Research methods are valid. The reference material is sufficient and well chosen. Presentation of results is excellent. The validity and significance of the results is evaluated. Conclusions and outlook show insight and coherent view on the topic of the thesis.
ii) Structure and quality of presentation	Thesis lacks structure. The text has not been written according to the standards of scientific writing. Citations to references are lacking. The overall style does not conform at all to standard of scientific writing. The figures and equations are irrelevant or poorly connected to the text.	Significant structural deficiencies. The use of the standards of scientific writing and citation technique are deficient. The thesis is not of appropriate length or the requirements on the overall style are not met. The figures and tables in the thesis are of poor quality, lacking or do not support the text. The equations are unclear, unnecessary or wrong, or the symbols are not explained. The thesis contains lots of grammatical errors, lack of preciseness or scientific mistakes.		The structure of the thesis is good. The thesis conforms largely to the standards of scientific writing. The length is acceptable and the requirements on the overall style are mostly met. The figures and tables in the thesis are informative and support the written text. The equations are mostly in balance with the written text. The text is mostly clear and grammatically precise.		The structure of the thesis is excellent. The thesis conforms to the standards of scientific writing. The length is suitable and the overall style is excellent. The figures and tables in the thesis are prepared well, are informative and support the written text. The equations are sufficient and well balanced with the written text, and all used symbols and acronyms are explained. Language and appearance are exemplary.
iii) Work process	Independence and capabilities to collaborate with the supervisor are difficult to assess or nonexistent. The thesis takes exceptionally long time to finish	Independence is largely missing and the thesis proceeds mainly by the decisions and advices of the supervisor. The student lacks understanding of the methodology applied in the thesis. The thesis falls significantly behind the planned schedule.		Some independent thinking during the thesis work. Student interacts with the supervisor, but requires often external input for making minor decisions. Work proceeds mostly according to the planned schedule.		Creativity and independence in analysis and inspection of the results. Skilled collaboration and/or interaction with the supervisor and other team members (if relevant) during the thesis work. Planned schedule is met.

Assignment and content :

5: The topic of the thesis is presented well and research goals are well defined. The research questions are formulated well. Research methods are valid and clearly presented. The reference material is sufficient and well chosen. Presentation of results is excellent and conclusions related to the research questions are drawn. The validity and significance of the results is evaluated. Conclusions are thorough and outlook shows that the student has clear and coherent understanding of the topic of the thesis.

4: *Not quite 5, but definitely more than 3.*

3: The topic of the thesis is presented robustly in line with the research goals. Research methods are sufficient and correctly used. Reference material is adequate. Presentation of results is acceptable and conclusions for the research questions are drawn. Conclusions and outlook show that the student is familiar with the research topic.

2: *Not quite 3, but definitely more than 1.*

1: Research topic is narrowly described and the linking of the research goals with the wider background is insufficient. The references used are limited and the overall dependence of the text on the references is obvious. The work shows limited or incorrect understanding of the thesis topic.

0: Essential elements are missing (e.g. introduction or conclusions). The reference material is absent or it has not been used in an appropriate way. Research topic is vague or severely misunderstood.

Structure and quality of presentation:

5: The structure of the thesis is excellent. The thesis has been written according to the standards of scientific writing. The use of references conforms to the principles of scientific writing. The length is appropriate and the requirements on the overall style are met. The figures and tables in the thesis are prepared well. They are informative and support the written text. The use of equations is well balanced with the written text, and all used symbols and acronyms are explained. The thesis is exemplary in language and in appearance

4: *Not quite 5, but definitely more than 3.*

3: The structure of the thesis is good. The thesis conforms largely to the standards of scientific writing. The use of references conforms to the principles of scientific text. The length is acceptable and the requirements on the overall style are mostly met. The figures and tables in the thesis are informative and related to the written text. The equations are mostly in balance with the written text. The text is mostly clear and grammatically precise.

2: *Not quite 3, but definitely more than 1.*

1: Significant structural deficiencies. The use of the standards of scientific writing and citation technique are deficient. The thesis is not of appropriate length or the requirements on the overall style have not been met. The figures and tables in the thesis are of poor quality and detached from the text. The equations are unclear, unnecessary or wrong or the symbols have not been properly explained. The thesis contains lots of grammatical errors, lack of preciseness or scientific mistakes.

0: Thesis lacks structure. The text has not been written according to the standards of scientific writing. Citations to references are lacking. The overall style does not conform at all to the standards of scientific writing. The figures and equations are irrelevant or not connected to the text.

Work process:

5: The student shows creativity and independent thinking in analysis and inspection of the results. The student shows good interaction skills with the supervisor and (if relevant) with other team members as well as good team member skills if the thesis work was done within a research team. Work progresses in the planned schedule, and the student informs the supervisor of the possible changes in the schedule

4: *Not quite 5, but definitely more than 3.*

3: The student shows independent thinking during the thesis work. Student interacts with the supervisor and (if relevant) other research team members, but requires often external input for making minor decisions. Work proceeds mainly in the planned schedule.

2: *Not quite 3, but definitely more than 1.*

1: Independence is largely missing and the thesis proceeds mainly by the decisions and advices of the supervisor. The student lacks understanding of the methodology applied in the thesis. The thesis falls significantly behind the planned schedule.

0: The independence and capabilities to collaborate are difficult to assess or inexistent. The thesis takes exceptionally long time to finish.