Evaluation Guidelines for Bachelor Theses

The learning objectives of the bachelor thesis and seminar are the following: the student understands the scientific method, can find existing information, can analyze and apply the available knowledge, and can write scientific text and give a presentation. The bachelor thesis may have an experimental or applied part, or it may be entirely based on literature. A good bachelor thesis includes results of the student's own thinking, such as combining and applying knowledge in a new way. However, the bachelor thesis is not required to present new scientific discoveries or solutions to open engineering or business problems. The focus in the seminar is on the formal aspects of scientific writing.

The evaluation is based on the written thesis and, for a small part, on the seminar presentation. The seminar may include other assignments that do not influence the grade. The required assignments must, however, be completed to receive the study credits.

There are many accepted practices and quality criteria for scientific thinking and writing. The purpose of the evaluation criteria is to direct the student's attention to these different goals and requirements. Therefore, this document defines a relatively long list of criteria. Nevertheless, the thesis is evaluated and graded as a whole and not by calculating an average across the different criteria.

The thesis advisor evaluates the thesis and provides an evaluation statement. The evaluation statement consists of a form where the advisor marks the key strengths and weaknesses of the thesis in relation to the evaluation criteria, a proposed grade, and a written evaluation. The written evaluation typically starts with a brief overview of the thesis, then describes a few important strengths and weaknesses, and ends with a summary. When using the evaluation form, it is not necessary to write text about each evaluation criterion separately. The responsible teacher of the bachelor seminar verifies consistent interpretation of the evaluation criteria and issues the final grade.

Evaluation criteria

Command of the topic

Knowledge of the topic

The author has carefully learned about the topic area. The reader gets a good overview of the topic from the thesis.

Sources of information

The thesis makes use of high-quality of research literature and other reliable sources of information. The selected sources are representative of the scientific research and other knowledge in the topic area.

Theoretical and conceptual frameworks

The thesis describes and makes correct use of important concepts, abstractions, and scientific theories related to the topic area.

Goals, implementation, and results

Definition of the goals

The topic and goals of the thesis are clearly described. The thesis has a well-defined research or engineering problem, to which it seeks answers.

Methods

The methods used in the thesis project have been defined, and they fit the purpose. The methods are applied following the best practices of the field.

Results and conclusions

The thesis has understandable results and/or conclusions. They are logical and well justified, and the thesis includes a critical evaluation of their significance and reliability.

The author's own work and thinking

The thesis contains results of the author's own work and thinking. It is easy for the reader to identify, on one hand, the author's own contribution, and on the other hand, content that is directly based on literature.

Challenge

The topic and goals are challenging considering the stage of the student's education. The requirement level of the work is in line with the learning goals of the bachelor's degree.

Presentation

Structure and style

The structure and writing style of the thesis are suitable for a scientific study.

Citations

Information sources are cited following the standard practices of the field. The references help the reader to assess the origin of the information and to find further information.

Figures, tables, and examples

The thesis includes figures, tables, and examples, which are meaningful and illustrative. They are original work by the author, or they have been adapted for their purpose.

Language

The language in the thesis is correct Finnish, Swedish, or English.

Readability

The text is clear and helps the reader to understand the content.

Seminar presentation

The seminar presentation is clear, illustrative, and provides useful information to the audience. The presentation covers carefully selected important content from the thesis. The author is able to answer questions about the work.

Process

Following instructions

The author has followed the provided instructions, the advisor's advice, and the planned timetable. The timetable may have been agreed individually with the advisor.

Scope

The thesis goals and the amount of work correspond to the number of study credits. If necessary, the scope has been adjusted during the thesis process.

Independent work

The thesis research and writing are independent work by the author. When the project has been conducted in a group or in cooperation with the advisor, the thesis explains the author's individual contributions.

Requirements for the grades

5: The thesis satisfies the evaluation criteria with no significant shortcomings. The results of the author's own thinking and work are prominent in the thesis. The work has special merits.

- **4**: The thesis satisfies the evaluation criteria with no significant shortcomings. Additionally, the thesis has at least one clearly observable strong aspect. For example, the thesis may demonstrate deep knowledge of the topic area, it may include a carefully conducted experiment or applied project, or it may present knowledge in a new form that is useful to the reader.
- **3**: The thesis satisfies most of the evaluation criteria with no significant shortcomings. Alternatively, the thesis has clear strengths but also weaknesses, so that it does not meet the criteria for the higher grades.
- 2: The thesis satisfies most of the evaluation criteria, but it also has some significant weaknesses.
- 1: The thesis has serious weaknesses related to multiple evaluation criteria. Judged as a whole, it nevertheless meets the requirements for a bachelor thesis.
- **0**: The thesis has serious weaknesses related to multiple evaluation criteria. Judged as a whole, it does not meet the requirements for a bachelor thesis.