



INSTRUCTIONS FOR PRE-EXAMINERS AND OPPONENTS AT PUBLIC DEFENCES OF DOCTORAL DISSERTATIONS

The pre-examination process and the role of the pre-examiner

The purpose of the pre-examination of a doctoral dissertation is to ensure that a manuscript intended for presentation as a doctoral dissertation meets the scientific and formal requirements and that the scientific standard of the dissertation is adequate before permission for its publication is granted. The pre-examination is also the stage at which the Faculty Council and the pre-examiners appointed by the Faculty Council can exert influence over the standard of the dissertation or recommend that it be rejected.

The Faculty Council appoints at least two pre-examiners for the dissertation. They should have the competence of a Docent or corresponding merit demonstrated in some other way. As a rule the pre-examiners should be external to the University of Tampere. The Faculty Council decides on the granting of permission for publication on the basis of the pre-examiners' statement(s). It is therefore the responsibility of the pre-examiners (and the supervisor of the work) to see to it that no incomplete work reaches the stage of the public defence and to ensure that the author is required to make the necessary corrections as well as any additions before the statement on permission for publication is written.

The pre-examiners of a doctoral dissertation should propose clearly in a reasoned written statement either that permission to publish the dissertation be granted or that such permission be withheld; that is, to state whether the manuscript as it stands or with minor corrections meets the minimum requirements of a doctoral dissertation. The statement should be either for or against; not conditional. In other words, the statement may not say that the manuscript can be recommended for publication only after certain corrections. In their statement the pre-examiners may give the author suggestions for corrections and improvements. The pre-examiners may also present a joint statement. **The statement should be given within three months of the appointment of the pre-examiners by the Faculty Council.**

The University of Tampere is committed to observing the guidelines drawn up by the National Advisory Board on Research Ethics regarding good scientific practice and dealing with infringements. Prior to its pre-examination, the manuscript is checked with the Turnitin plagiarism-prevention program.

Instructions for the statements by the pre-examiner

Depending on the field of science and research, the statement by the pre-examiner should pay attention **as appropriate** to the following considerations:

1. General nature of the doctoral dissertation

A brief description of the topic and scientific content of the doctoral dissertation in relation to the general field of the particular scientific discipline

2. Research topic and formulation of research questions

- clear definition of the background to the research and its points of departure
- societal and practical importance of the research topic
- scientific importance of the research topic
- originality and innovativeness of the study design
- is the formulation of questions scientifically relevant and in proportion to research gaps or conflicts
- precision of the research objectives and the research problem

3. Theoretical section of the study and knowledge of earlier literature

- knowledge of the literature in the scientific field, and the up-to-date and comprehensive nature of the literature; observation of any clear shortcomings
- theoretical depth (strength) of the study, familiarity with theoretical discussion and justification for theoretical choices
- has the study generated its own theory successfully
- the author's ability to reduce and combine the central observations of the literature and the author's skill to examine the literature in a critical way

4. Research methodology, research materials and empirical research section

- are the research methods and materials chosen suitable vis-à-vis the research problem
- were new methods developed in the work
- was data collection accomplished in a scientifically competent manner and were the data selected adequate and appropriate for investigating the research problem
- are the statistical methods or other means of handling the data that were applied appropriate for the problem and the data
- is the data analysis done with a method corresponding to the formulation of the research question and the research approach
- is the empirical section of the research carried out appropriately and thoroughly
- what was the author's independent share of the data collection, processing etc.

5. Research results, conclusions and their presentation

- are the conclusions clear and precise
- are the conclusions based on the analysis done in the work and are they credible/reliable
- are the research results new or unexpected
- are the results evaluated critically from the viewpoint of alternative theories and interpretations, and are they weighed against research done on the topic previously
- assessment of the societal and scientific importance of the research results (reliability) and of how well the author has been able to present these himself/herself
- has the author made meaningful suggestions concerning possible further research or what kind of further research the work would give reason to do

6. Organization and mode of presentation of the work

- assessment of the extent of the doctoral dissertation; does the manuscript contain needless repetition or sections unnecessary in relation to the research task
- does the doctoral dissertation form a balanced scientific whole
- assessment of the work's organization and use of headings
- assessment of the style, linguistic precision, clarity and readability of the scientific presentation
- assessment of the informativeness and clarity of the figures and tables

7. Summary

The doctoral dissertation should demonstrate the author's in-depth familiarity with his/her field of research and the ability to create new scientific knowledge by means of scientific methods. The doctoral dissertation is a controlled, coherent whole based on the author's own independent research and containing new scientific knowledge. The research must be scientifically honest, thorough and precise. It must comply with the norms of research ethics in its starting point and in all respects.

The pre-examiner's statement should give a brief summary of the standard of the doctoral dissertation and its greatest merits as well as the shortcomings observed. At the end of the summary, the pre-examiner should state whether he/she recommends that permission for publication be granted; **no conditional statements should be given.**

After permission for publication has been granted, a pre-examiner may negotiate with the author regarding minor shortcomings and errors, and arrange for their correction. If the scientific standard of the doctoral dissertation is inadequate or if the shortcomings in form and content are considerable and pertain to essential points in the dissertation, the pre-examiner should submit a

statement to the Board without recommending that permission for publication be granted, after which the Board will decide on further measures. The doctoral candidate is given an opportunity to reply to the pre-examiners' statements.

Compilation thesis

A compilation thesis refers to a doctoral dissertation made up of several scientific publications or manuscripts accepted for publication or other manuscripts meeting the same scientific criteria and dealing with the same topic. A compilation thesis consists of an introductory chapter and at least three separate scientific publications. Most of the separate publications should be published or accepted for publication in scientific journals or other high-level scientific forums.

The introductory chapter and separate publications of a compilation thesis should deal with a consistent scientific problem or set of problems in such a way that the scientific standard of the doctoral candidate's overall performance corresponds to that of research for a doctoral dissertation.

The introductory chapter of a compilation thesis should be an independent entity made up of the following components: formulation of the problem; theoretical frame of reference; materials and methods; results; and assessment of the importance of the results and conclusions. Considered on their own, the separate publications included in the doctoral dissertation should yield a scientific contribution.

Co-authored publications in which the doctoral candidate has made an independent contribution may be accepted as part of the compilation thesis. A compilation thesis containing co-authored publications should include an introductory chapter and at least four separate publications, most of which should be published or accepted for publication.

The doctoral dissertation author supplies the separate publications already published or accepted for publication for pre-examination without editing or rewriting, and presents a list of where the articles have been published or accepted for publication. The doctoral candidate is responsible for taking copyright issues regarding the dissertation into account. In the same connection, the author must submit a written report stating what share of the co-authored publications is the researcher's own independent work.

In evaluating a research entity intended for a compilation thesis, the pre-examiners present their own assessment of the scientific standard of the doctoral dissertation as a whole (the introductory chapter and the separate publications) regardless of the standard of the publication forum. The pre-examiners' task is to assess whether the introductory chapter and separate publications, as well as the doctoral candidate's share of the co-authored publications, constitute an entity that corresponds to the requirements for a doctoral dissertation. On the basis of this assessment, they present to the Board whether permission to publish the work can be granted.

Negative statement

A pre-examiner should recommend that permission be withheld if it is clear that the work is not a coherent presentation containing new scientific knowledge and based on the author's own independent research work. A pre-examiner should also consider presenting a negative statement when there are other major shortcomings in the work, such as

- a seriously deficient theoretical frame of reference
- a set of research data that is clearly too restricted for a doctoral dissertation
- serious shortcomings in knowledge of the research literature of the field
- the work is otherwise seriously incomplete

On the other hand, shortcomings which can be remedied by simple editing (e.g. an unclear introduction, an incomplete summary, order of chapters, linguistic shortcomings), additional data to be acquired with a reasonable amount of work or better familiarity with the research literature to be achieved with a reasonable amount of work are not necessarily an obstacle to a positive statement.

The outcome of a negative statement is generally that the pre-examination is discontinued at the request of the postgraduate student concerned. When corrections have been made and the supervisor recommends that the pre-examination be resumed, the Faculty Council will again appoint pre-examiners for the work. The Faculty Council, at its discretion, may ask the same or different individuals.

Instructions for the statement by the opponent

The opponent is required to give a statement within **one month** of the public defence of the doctoral dissertation. The statement should note whether the opponent recommends that the doctoral dissertation be accepted. **The statement should be addressed to the Faculty Council and delivered to the Head of Administration.**

The opponent's statement consists of the examination of the dissertation manuscript and an assessment of the public defence. The opponent's statement should pay attention to the same aspects as that (those) of the pre-examiners: the research subject and formulation of the question, the theoretical background of the research, material and methods, the research results, the scrutiny and conclusions, the independence and maturity of the author, and the clarity and polishing of the work. In addition the opponent should assess the author's ability to defend his/her dissertation at the public defence. The opponent's statement should clearly reveal whether the opponent proposes that the dissertation be accepted with the grade proposed by the evaluation board.

The opponent's written statement should include an assessment of the scientific significance of the dissertation, a brief description and critique of the public defence.

The opponent's statement ends with a separate summary where it should be clearly stated whether

- the scientific standard of the dissertation is sufficient
- the topic of the research scrutinized was the author's own or original
- the results are new or a confirmation of existing observations and their extension
- the treatment was original and balanced with regard to scientific method and form

Mention must be made especially if, in the field of research concerned, the observations are of central importance and considerable international significance.

Evaluation board

The Faculty Council appoints an evaluation board when permission for publication is granted. The evaluation board presents a proposal to the Faculty Council on the grade to be given for the doctoral dissertation. The members of the board are the pre-examiners, the opponent and one other Professor, Docent or doctoral degree holder with a corresponding standard of scientific merit prescribed by the Faculty Council.

Grading of a doctoral dissertation

The Faculty Council decides on the approval of a doctoral dissertation and the grade to be awarded. The evaluation board's written statement, containing a reasoned proposal for the grade to be awarded for the dissertation, is presented to the Faculty Council and the doctoral candidate at the same time. Before the Faculty Council takes a decision on the matter, the doctoral candidate is given an opportunity to reply to statements presented by the evaluation board. The doctoral candidate has the right to request that the grading be deferred to the next meeting of the Faculty Council.

The scale to be used for grading a doctoral dissertation is: accepted; good; excellent. A dissertation is graded taking into consideration the merits of the work: the scientific significance of the research problem and the results; the independent nature and originality of the work; and scholarly maturity. A doctoral dissertation should demonstrate the student's ability to create new scientific knowledge independently.

Grading scale**Accepted**

The doctoral dissertation meets the minimum criteria set by the Faculty of Management for a doctoral dissertation. Its research task is clear and linked with the research literature, its methods are suitable and its results are consistent. The work demonstrates the independence and academic maturity required of a doctoral dissertation.

Good

The dissertation is better than average. Its research problem is original and based on a new type of approach to the phenomenon under study. The analysis is systematic and reflective. The research as a whole is harmonious and balanced. The results are well-founded and scientifically important to the field of research. The work demonstrates scientific maturity and good familiarity with research in the scientific discipline.

Excellent

The dissertation in all respects is especially meritorious. The research task is structured with insight, the reasoning reflects depth of scientific philosophy and the analysis indicates that the author is also commendably familiar with alternative interpretations and theories. The results of the work are exceptionally significant to the scientific discipline. The work demonstrates the author's exceptional scientific maturity and ability for new, creative methodological and theoretical thinking. The doctoral dissertation was defended superbly during its public examination. The doctoral dissertation is among the top 5% in its field internationally.