



**Karolinska
Institutet**

The public defence of a doctoral thesis

Information for

**the Examination Board, Opponent and Defence
Chairperson**

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Introduction

This document is a compilation of the rules and procedures regarding the defence and examination of doctoral theses at KI. For full access to KI's *Rules for doctoral education at Karolinska Institutet*, visit the KI website.

The purpose of this document is to make it easy for examination board members, opponents and defence chairmen to read up on their assignment.

Examination Board – role and responsibilities

The examination board is appointed by the Dissertation Committee on behalf of the Committee for Doctoral Education.

The role of the examination board is to judge the doctoral student's performance at the defence, the scientific quality of the constituent papers and the quality of the kappa (the comprehensive summary), and to ensure that the degree objectives have been fulfilled (read more under *What is examined?* below).

The examination board is also required to conduct a preliminary review of the constituent papers (read more under *Preliminary review* below).

Members of the examination board

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.5:

"The examination board shall comprise three members (in exceptional circumstance, such as a doctoral thesis being of a particularly interdisciplinary character, the number of members on the examination board may be increased to five). [...] One of the members shall be designated as the coordinator."

Coordinator of the examination board

The responsibilities of the coordinator are:

- To ensure that the preliminary review of the constituent papers is conducted and that the form *Examination Board's Preliminary Review* is sent to the Dissertation Committee by no later than two weeks after receiving the relevant material.
- To ensure that any comments made by an individual examination board member at the preliminary review are made known to all members and to facilitate further discussions within the board.

More information under *Preliminary Review* below.

Opponent – role and responsibilities

The *opponent* is appointed by the Dissertation Committee on behalf of the Committee for Doctoral Education.

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.4:

"The role of the *opponent* is to critically review all parts of the thesis, both the kappa and the constituent papers, and to discuss these in detail with the respondent (the doctoral student) during the thesis defence. The opponent is to highlight the strengths and weaknesses in the thesis in a discussion with the respondent, in which the respondent shall also have the opportunity to demonstrate knowledge obtained. This discussion shall cover both technical and practical details, and how the results of the thesis may be viewed in a broader context." (More information under *Public defence proceedings* below.)

It is recommended that the opponent structures the discussion with the degree outcomes (see Appendix) in mind to give the doctoral student the opportunity to demonstrate and describe his/her knowledge, understanding and abilities in relation to the objectives. The doctoral student's and principal supervisor's reports on the student's learning and development¹ can serve as a basis. The reports should be sent, together with the printed thesis, to the opponent no later than three weeks before the public defence. (see more below under *Degree Objectives*)

Please observe that contact between respondent/supervisor and the opponent should be limited to only practical issues. It is strongly recommended not to discuss the content of the thesis with the respondent before the public defence.

Any suspicion of possible deviation from good research practice must be reported. Please see *Unexpected events* below.

Defence Chairperson – role and responsibilities

The chairperson's responsibility is to host and coordinate the defence. He/she is expected to know the proceedings (see *Public defence proceedings* below) and being able to handle any complications (see *Unexpected events* last page).

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.9:

"The public defence is led by a Public Defence Chairperson. A member of KI faculty who has a doctoral degree is appointed chairperson. It is not recommended that the chairperson be one of the supervisors."

¹ Only applies to doctoral students submitting an application for public defence from 2024-03-01 onwards

The thesis

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.1:

"Most theses from KI are compilation theses, based on a number of separate original papers combined with a *kappa* (comprehensive summary).

The number of constituent papers in a compilation thesis varies, but they must have a scope that in total is equivalent to four years of full-time doctoral education and a scientific quality expected at an international renowned university. The doctoral student's contribution to the constituent papers must be clearly identified."

(A doctoral thesis may also be presented in the form of a monograph thesis. Special rules then apply, see *Rules for doctoral education at KI, section 7.2.2.*)

Preliminary review

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.6:

"Before the thesis is submitted for printing, the examination board shall conduct a preliminary review (Sw: förhandsgranskning) of the thesis in order to assess if the quality of its constituent papers is of a sufficiently high standard for a PhD degree.

In the event of disagreement, the matter is decided by the majority opinion, even if all members of the board are expected to comment in its pronouncement.

If the examination board deems the quality of a thesis to be insufficient, the student is recommended to postpone the defence of his/her thesis. On the first such occasion, the student is entitled to further supervision and educational resources for an additional six months over and above the original study schedule in order that he/she may have the opportunity to improve the quality of his/her work."

When making its recommendation, the examination board must consider whether the papers meet the standards of four years of full-time doctoral studies at a highly ranked international university. This is a subjective assessment that requires both expertise and integrity from the members of the examination board.

Special attention should be placed on unpublished manuscripts. The student's contribution to each article is indicated in the defence application and should be taken into consideration.

Please note that the examination board cannot in the preliminary review ask for more papers to be published.

Routines:

Following documents should be sent by the doctoral student to the examination board:

- All constituent papers and manuscripts
- A copy of the granted application for public defence
- A copy of the half-time review protocol

- The form *Examination board's preliminary review* to be filled in by the examination board

The doctoral student also sends the reports on the doctoral student's learning and development as a researcher including achievement of outcomes for degree². (See purpose under *Degree Objectives* below.)

After the examination board has received the documents, it has two weeks to complete their preliminary review and the coordinator to send in the concluding assessment.

Please observe that any contact between respondent/supervisor and examination board members should be limited to only practical issues. It is strongly recommended not to discuss the content of the thesis with the respondent before the public defence.

What is examined?

From Rules for Doctoral Education at Karolinska Institutet, section 7.2.11:

"The examination board shall assess the thesis and its public defence with regard to:

- the respondent's **presentation** of the thesis at the public defence, including the discussion with the opponent, and the ability to answer questions and discuss the significance of the results within the field of research,
- the quality of the **kappa (comprehensive summary)**,
- the scientific content of the **constituent papers**,
- the fulfilment of the **objectives of the doctoral degree**.

In light of this assessment, the examination board comes to a decision to award a grade of either pass or fail."

The Kappa / Comprehensive summary

The examination board is required to judge the quality of the kappa (comprehensive summary).

From Rules for Doctoral Education at Karolinska Institutet, section 7.2.1:

"The purpose of the kappa is to:

- demonstrate the depth and breadth of knowledge and understanding they have of the research field, and their ability to identify a need for further knowledge in the field,
- encapsulate the aim of their research project and the hypotheses/points of enquiry that have been addressed,
- demonstrate familiarity with the methods applied in the research field,

² Only applies to doctoral students submitting an application for public defence from 2024-03-15 onwards

- demonstrate an ability to place their own research in a wider context of the latest research in the field,
- demonstrate that the intended outcomes for doctoral education (degree objectives) have been achieved.

The kappa should be weighted towards a reflective discussion and contextualisation of the student's own research results. The text of the kappa must be the student's own original work without the extensive reproduction of extracts from the constituent papers."

At the latest on the day when the thesis is made public through "nailing", i.e. three weeks prior to the defence, the respondent sends the printed thesis to the opponent, examination board and defence chairperson (*Rules, section 7.2.8*).

Should the examination board judge the quality of the kappa to be insufficient, the matter should be taken up with the respondent at his/her defence.

Text-matching and plagiarism

On "nailing", the thesis kappa is run through a text-matching system. The ensuing report is then sent to the members of the examination board by the University library. The purpose of the report is to serve as a tool when assessing the quality of the kappa.

With the report the examination board will receive instructions on how the report is interpreted. The instructions are also available on the KI website.³

The Degree Objectives

Part of the examination board's task is to assess whether the objectives of the doctoral education have been met. Special focus should be placed on the objective B3 "...to demonstrate through the writing of a thesis the ability to make a significant contribution to the development of knowledge through his/her own research." (see appendix).

If the examination board is uncertain whether the respondent has achieved all objectives, questions should be asked to give the doctoral student the opportunity to show and describe his/her knowledge, understanding and abilities according to the objective in question. The reports on the doctoral student's learning and development including achievement of outcomes for degree can be used as a basis.

Please find information on the KI web site on how the degree objectives can be achieved⁴ and how the doctoral student can show achievement in the kappa.⁵ Note that the defence application, and the constituent papers also provide information regarding objective fulfilment.

³ <https://staff.ki.se/plagiarism-checks-in-doctoral-education>

⁴ <https://staff.ki.se/outcomes-for-doctoral-education-according-to-the-higher-education-ordinance>

⁵ <https://staff.ki.se/content-of-the-thesis>

Reports on the doctoral student's learning and development as a researcher, including achievement of outcomes for degree

Both the doctoral student and principal supervisor have written reports of the doctoral student's learning and development.⁶

The purpose is to provide an overall picture of the doctoral education. This is a complement to the results presented in the kappa and in the papers and constitutes a basis for the examining board and opponent as they prepare the public defence.

Public defence proceedings

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.9:

"The public defence shall be public and preferably held in English, but Swedish is also acceptable.

If the proceedings are very long, the chairperson may suspend them for a break. Under no circumstances may the defence proceedings be concluded until all opposition and discussions from the opponent, the examination board members and the auditorium have been dealt with."

"Public defence proceedings:

1. The chairperson will open proceedings and present the respondent, the title of the thesis to be defended, the opponent and the examination board.
2. The respondent gives notice of any corrections to the thesis and may, if necessary, distribute a list of errata.
3. The opponent or the respondent are invited to present a brief popular scientific introduction to the thesis and the field dealt with by the research.
4. The respondent or the opponent presents the main results and conclusions of the thesis.
5. The opponent discusses the thesis with the respondent, comments on its strengths and weaknesses, and poses questions which the respondent must answer to the best of their ability.
6. The chairperson invites the examination board to pose questions.
7. The chairperson invites the audience to pose questions.
8. The chairperson concludes proceedings."

⁶ Only applies to doctoral students submitting an application for public defence from 2024-03-15 onwards.

Digital participation

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.9:

"The examination board and *opponent* may take part remotely via a digital platform provided that it does not compromise the quality of proceedings. Should a technical problem arise, the proceedings must be suspended until it is properly and satisfactorily resolved.

The respondent and the chairperson must be present in person, and may only take part remotely for exceptional reasons (e.g. a pandemic) upon the approval of the Dissertation Committee.

A remote audience is allowed, but it is only the audience present in the auditorium that can be guaranteed an opportunity to interact with the respondent."

Examination board meeting following the public defence

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.10 and 7.2.11:

"Following the public defence, the examination board is called to an immediate meeting to decide on the grade. The examination board appoints a chairperson from amongst themselves.

The examination board meeting is comprised of two parts:

1. In the first part, the public defence chairperson, supervisors and the opponent may be present for discussing the respondent's performance with the examination board.
2. In the second part of the meeting, only members of the examination board are present. The grade and the written justification for this are confirmed, after which the minutes are written up and signed.

If there are any remarks made during the public defence which were so extraordinary that the examination board considers it necessary to undertake specific investigations or consultations before a decision can be made, the examination board should adjourn the meeting. The adjournment must be short, two weeks at most."

"The decision of the majority applies. A single member may dissent from the examination board's decision on the grade, in which case specific justification must be given.

The examination board must provide a written justification when awarding a fail. The doctoral student then has the opportunity to, at a later date, re-apply for a public defence of their thesis."

Unexpected events

Sometimes complications may occur affecting the public defence proceedings and the defence chairperson has the responsibility to handle the situation.

Unable to attend

If any of the examination board members or the opponent fail to attend, the defence can 1) be postponed awaiting late arrival, 2) the person can be connected digitally or 3) a new person can be appointed.

from Rules for Doctoral Education at Karolinska Institutet, section 7.2.9:

"If the opponent is unable to attend, the public defence may proceed with the examination board taking on the role of the opponent.

If one of the examination board's members is not present at the public defence, the chairperson must contact the dissertation committee administrator [contact information below] so that a new member can be appointed. There must be three examination board members for the public defence to proceed."

Suspicion of irregularities

At any suspicion of possible deviation from good research practice, conflicts of interest, cheating or any other misconduct arises either at the preliminary review or at the public defence, it must be reported, see contact information below.

Contact information

- Matters concerning formalities or to report irregularities: disputation@ki.se. E-mails are read regularly during office hours by dissertation committee administrators.
- Matters concerning practicalities: The director of doctoral studies or the doctoral education administrators at the respective KI department: <https://staff.ki.se/contact-directors-of-doctoral-studies-and-administrative-officers-at-the-departments>

General information regarding doctoral education at KI: <https://staff.ki.se/doctoral-education-support>

APPENDIX. Objectives for Doctoral Degree

A. Knowledge and understanding

For the doctoral degree, the doctoral student is required to

- A1. demonstrate broad knowledge and systematic understanding of his/her research field as well as deep and current specialised knowledge in a particular aspect of this field, and
- A2. demonstrate familiarity with scientific methodology in general and with the methods of his/her specific field of research in particular.

B. Proficiency and ability

For the doctoral degree, the doctoral student is required to

- B1. demonstrate a capacity for scientific analysis and synthesis and the independent critical review and assessment of new and complex phenomena, issues and situations,
- B2. demonstrate an ability to identify and formulate research questions critically, independently, creatively and with scientific rigour, and to plan and conduct research and other advanced tasks using appropriate methods and within given time frames as well as to review and evaluate such work,
- B3. demonstrate through the writing of a thesis the ability to make a significant contribution to the development of knowledge through his/her own research,
- B4. demonstrate an ability to present and discuss research and research results, orally and in writing and with authority, both in national and international contexts and in dialogue with the scientific community and in society in general,
- B5. demonstrate an ability to identify the need for further knowledge, and
- B6. demonstrate an ability to contribute to the development of society and to support the learning of others in research, education and other advanced professional contexts.

C. Judgement and approach

For the doctoral degree, the doctoral student is required to

- C1. demonstrate intellectual independence and scientific integrity as well as an ability to make ethical judgements in research, and
- C2. demonstrate deeper insight into the possibilities and limitations of science, its role in society and the responsibility of the individual in its application.