# Guidelines by the Faculty of Science for preparing evaluation committee recommendations in connection with doctoral theses

#### I. Introduction

These guidelines for the evaluation committee aim at ensuring the best possible decisionmaking basis for the Academic Council and a level of uniformity in drawing up recommendations and statements.

A doctoral degree should be viewed as recognition that the author of the thesis has considerable scientific insight and maturity, and that the author has contributed substantially to the advancement of science with the thesis, see section 3(2) of Ministerial Order no. 750 of 14 August 1996 of the Danish Ministry of Education on doctoral degrees.

Therefore, it is extremely important that the expert knowledge and experience represented by the expert committee is the highest attainable within the topic of the thesis to ensure that the initial premise for making a qualified evaluation is fulfilled.

With regard to *issues of legal capacity*, refer to the <u>Guidelines for managing issues of legal capacity</u> at the <u>University of Copenhagen</u> (only in Danish).

As the award of a doctorate is considered an administrative act, the regulations of the Danish Public Administration Act apply.

## II. Recommendations by the evaluation committee

Following recommendation from the relevant institute, the Academic Council sets up an evaluation committee comprising two or three members (an extended evaluation committee may include up to five members). The Academic Council appoints its chairperson among the members of the evaluation committee. The chairperson must be a member of staff at the Faculty of Science (SCIENCE).

## II.1. Responsibilities of the chairperson

The chairperson has an *instruction obligation* to the other committee members, and is responsible for compliance with the *deadline stipulated for submitting* the recommendation.

As early as possible, the chairperson must apply for an extension of the time limit, if the deadline for submission cannot be met.

The chairperson must ensure that any *questions* concerning the committee's work are resolved as quickly as possible.

*II.2. Function of the recommendation. Conditions for the committee's work*The main purpose of permitting an evaluation committee to process and evaluate a submitted doctoral thesis is to ensure impartial and qualified evaluation of the thesis.

However, the evaluation committee must also ensure the best possible foundation for the Academic Council to be able to make a satisfactory decision. Accordingly, all committee members should be familiar with all the material presented to ensure that the doctoral thesis is subject to evaluation by all committee members.

In its form and contents, the recommendation must be drawn up ensuring that also nonexpert members of the Academic Council receive the guidance to which they are entitled with regard to the background, contents and results of the thesis, as well as the basis for the conclusion reached by the evaluation committee.

Any contact between the candidate for the doctorate and the evaluation committee regarding the thesis may only take place through SCIENCE Research and Innovation (SCI-FI).

As soon as possible following its establishment, the evaluation committee must familiarise itself with the material submitted, with the sole purpose of determining whether the formal presentation of the material corresponds with the provisions laid down by the faculty, see section 5 of the Ministerial Order and the supplementary rules and procedures laid down by the Faculty of Science. If the material submitted is insufficient, it will be returned to SCIENCE Research and Innovation (SCI-FI) together with a short specification of the points in the material failing to meet the rules.

Once the evaluation committee has approved the formal presentation of the material, the active consideration of the thesis itself can commence.

The evaluation committee must assess all the material submitted for the purpose of acquiring the doctorate; this includes results deriving e.g. from a PhD thesis. The evaluation committee must also assess whether, compared with the material already reviewed, the new research results represent such a substantial academic part of the overall scientific work that the author may be considered overall to "have considerable scientific insight and maturity, and that the author has contributed substantially to the advancement of science with the thesis".

The recommendation should be jointly prepared by the members. However, a draft may be drawn up by individual members following an agreed distribution of work and based on a preceding preliminary review by the committee.

If the committee disagrees about the evaluation, the committee may request each assessor to prepare separate evaluations. The introduction 1) as well as the conclusion 5) must have a common thread, see the paragraph below under "Form and contents of the recommendation".

The recommendation must be prepared as a separate document that does not require the reader's comparison with the author's written work, and it must be sufficiently detailed, clear and exhaustive so that the members of the Academic Council can follow the line of

thought from premise to conclusion. <u>The recommendation must unequivocally conclude</u> whether the thesis is recommended for approval or for rejection for defence

Furthermore, the recommendation must be written in an adequate *objective form*, see section 10(1) of the Ministerial Order, and in addition it must, also for non-expert members of the Academic Council, constitute a *satisfactory decision-making basis*, as the decision by the Academic Council is based on the quality of the guidance provided by the expert committee with its statement on approval or rejection of the work in question.

Finally, the committee should note that the recommendation in its entirety will be forwarded to the author, who is expected to check that the doctoral thesis has received a correct and fair evaluation.

If the evaluation committee recommends rejection of the thesis, the author will be notified that he/she may, within three weeks, submit written observations to the recommendation or withdraw the thesis for further processing, see section 11(2) of the Ministerial Order.

The recommendation derived as a result of the evaluation committee's work will generally be used as the decision-making basis for the Academic Council; it will be made available to the author, and it may later be used by other authorities and expert committees. This means that it will be used by experts, as well as non-experts, and therefore it must be prepared taking this into consideration.

Only members are allowed to participate in the committee's work. Members of the committee, members of the Academic Council and all other parties involved in the matter have a *duty of confidentiality*.

#### II.3. Evaluation criteria

The particular quality requirements for work submitted in order to achieve the doctorate are determined by the current level of research in the relevant field, at international level as well as nationally/locally. Therefore, it is not possible to provide an accurate and comprehensive description of the standard or level required for the work to be submitted to form the basis for awarding the doctorate.

However, the evaluation committee must stipulate whether the work submitted includes the following:

Does the work submitted include:

- 1) A clear and well chosen, and perhaps even original research question,
- 2) A relevant and well presented methodology applied and described to ensure that the reliability of the results cannot be disputed,
- Processing of the data collected, reflecting ability to interpret this data exhaustively and critically and to view the data in relation to other results published with maturity and creativity, and

4) Observations or interpretations to be considered significant new contributions for the development of the relevant area of research.

No later than six months after its establishment, the evaluation committee submits a <u>motivated, written recommendation</u> to the Academic Council on the approval of the thesis for defence of the doctorate, or on its rejection.

In practice, the final recommendation by the evaluation committee will be submitted to SCIENCE Research and Innovation (SCI-FI) via the institute, after which the recommendation by the evaluation committee will be processed by the Faculty Secretariat and sent for consultation with the candidate for the doctorate. After having received a reply from the candidate for the doctorate, a statement will be submitted to the Academic Council on whether the thesis can be approved for defence, see section 13 of the Ministerial Order.

The Academic Council will then make its decision.

#### II.4. Form and content of the recommendation

The following paragraphs are written presupposing that a doctoral thesis of the type 'multiple theses' exist, including an executive summary. Therefore, this should be read/used with the modifications necessary if the relevant doctoral thesis is a monograph.

The recommendation must comprise:

- 1) *Introduction* comprising the following:
- Name of the author and title of the thesis,
- Information regarding the composition of the evaluation committee and the date of establishment of the committee,
- The elements constituting the thesis, and the formal comments associated with these. Most often, the thesis will be in the form of a specific number of periodical articles, as well as an executive summary. Periodical articles and accepted manuscripts are listed in the order of priority chosen by the author, specifying all names of authors, titles and any occurrences in periodicals. If the thesis has more than one author, declarations describing the personal contribution of the individual authors must be accounted for in the individual work.
- The title of an executive summary, as well as its scope and breakdown, must be listed.
  - 2) Information regarding the thesis and its main results
- The committee prepares a brief description of the matters within the relevant research area that it finds have motivated the author to draft the specific research question for examination in the relevant study and thesis.

- The author's presentation of the research question and the main results of his/her work are briefly summarised. This paragraph should also include a short, general position on the general questions raised in the evaluation, i.e.
  - a) whether the work is completed in a well motivated manner, i.e. whether a fair, relevant and topical research question has been presented as a whole, and
  - b) whether the result achieved is insignificant or offers a new contribution, and the importance of such.

### 3) Review of the individual theses

- A detailed and technically accentuated review of the work. The aim is not to give a detailed summary of the contents of the thesis, but rather to establish the issues of the thesis (experimental technique in the broadest sense of the word and the logical structure of the conclusions) that form the basis for weighing the good points presented in the work, as well as any flaws. The individual theses are reviewed in the order of priority listed by the author. For each thesis, a description and evaluation is given of the research question and its relevance, the methodology used, the presentation of results achieved and the processing of such, as well as an interpretation and discussion of the results. The review of each thesis should result in a weighing of the good points of the work compared with any flaws.

## 4) Review of the executive summary

- The author has full responsibility for form and content of the executive summary. The executive summary thus makes it possible to assess whether the author itself has managed to provide a brief and clear summary of his/her research area and the correlation between the author's own research questions and research results in this respect.
- A final assessment of the work submitted is then made. The review must be written in clear and concise language so the written report can be understood by all members of the Academic Council.

#### 5) Conclusion

- This paragraph must include the final guidance of the evaluation committee for the Academic Council and must, without involving new views, refer to all important sides of the recommendation, including:
  - a) Purpose of the work. The results achieved and the committee's evaluation of these,
  - b) an overall weighing of the positive and negative aspects of the work, and
  - c) a final evaluation of whether the work represents efforts of a scope and quality that may form sufficient basis for approving a defence of the thesis. The author must

demonstrate considerable scientific insight and maturity, and the author must have contributed substantially to the advancement of science with the thesis

The evaluation committee may recommend to the Academic Council that a thesis be approved for defence of the doctorate, even though the committee assesses the executive summary has linguistically unfortunate formulations, "cosmetic errors", and similar, which should be rectified before publication of the final version of the thesis.

On the basis of the recommendation by the evaluation committee, the Academic Council will then decide whether the thesis can be approved for defence of the doctorate or whether it should be rejected, see section 13 of the Ministerial Order. The Academic Council only considers the recommendation by the evaluation committee (and does not take an independent position on the thesis itself).

## III. Rules governing withdrawal of the doctoral thesis

According to section 9(2) of the Ministerial Order, the author may, in the period from final establishment of the evaluation committee (including expiry of the time limit for appeal of the composition of the evaluation committee), and until receipt of the recommendation from the evaluation committee, *only* withdraw his/her thesis, if the faculty (the head of the faculty) allows this citing special circumstances. During this phase of the process, a justified application for withdrawal is thus required. If such application is not accommodated, the evaluation must be made and the evaluation committee must submit their recommendation, after which the author may again freely withdraw the thesis, see section 11(2).

The provision stating that the evaluation must be made even if the author has requested withdrawal must be viewed together with section 4(2), no. 3, which states that the faculty, and other higher educational institutions on completion of an evaluation of the thesis, are no longer obligated to evaluate the thesis. The purpose of the provision is thus to prevent authors from repeatedly making institutes spend the resources entailed in an evaluation process.

Conversely, the institute may not refuse to evaluate a thesis, even though it has been submitted to another institution previously, but was withdrawn *before* the evaluation committee had been set up.

Theses submitted for evaluation, but withdrawn before the evaluation committee had been set up, will be considered newly submitted when submitted again.

If the author has accepted the evaluation committee, see section 9(2), in any later submission of the thesis to another institute, the author is required to provide information that the thesis has been "subject to evaluation *previously*". This institute may then refuse to evaluate the thesis, see section 4(2), no. 3.

# IV. Possible participation in the processing by the Academic Council

In connection with processing of the recommendation by the Academic Council, members of the Academic Council who have questions pertaining to the recommendation may summon members from the evaluation committee to a meeting with the Academic Council in order to clarify such questions.

Notice must be no less than 14 days before the date of the meeting. Members of the evaluation committee may not participate in the voting by the Academic Council on the approval or rejection of a thesis. If, during the processing of the recommendation by the Academic Council, issues or information of significance to the decision of the Academic Council arise, SCIENCE Research and Innovation (SCI-FI) must notify the author in writing in this respect. The author must, within a time limit of no less than 14 days, be able to make observations before a decision is to be made by the Academic Council on approval or rejection.

#### References:

Ministerial Order no. 750 of 14 August 1996 of the Danish Ministry of Education on doctoral degrees, which entered into force on 1 October 1996.

Supplementary regulations and procedures from the Faculty of Science in connection with the above Ministerial Order adopted in December 2013.