### Wageningen University thesis evaluation form with rubric

#### Aim of a thesis evaluation with rubric

Quality standards for PhD theses differ worldwide, and so do evaluation procedures and grades such as cum laude (with distinction). Wageningen University provides the thesis committee and external experts with detailed information concerning the evaluation procedure and a rubric for the evaluation of a thesis. This information provides transparency of Wageningen University's thesis requirements to PhD candidates and their (co-)promotors.

#### Thesis evaluation form as sent to the thesis committee

Dear members of the thesis committee,

Thank you for your willingness to evaluate this PhD thesis. Wageningen University PhD theses are evaluated on five criteria using a standard form and a rubric which is provided at the end of this document. The aim of using a rubric is to enhance homogeneity of assessments and the ability to discuss assessments with other examiners and the (co-)promotor(s) (main supervisors). Also, it clarifies the expectations for a thesis to PhD candidates. The standard evaluation form also has comment fields to elaborate on your evaluation for each of the five criteria. The use of these comment fields is highly recommended for providing additional feedback. In the rubric:

- each row represents one criterion, e.g. originality of the research;
- each column represents a level for the grading, e.g. 'good';
- each cell describes the level for that criterion.

Please start at the lowest mark in the rubric and test whether the PhD thesis is better described by the next higher level. Achievements at lower levels are implicit at higher levels and not again included in the criteria. You are kindly asked to describe in 25 - 100 words your evaluation of each of the five criteria.

It could be that the PhD thesis scores 'unacceptable' on one criterion and 'good' on another. An 'unacceptable' for one of the five criteria designates that the thesis is not defendable in which case it is important to provide detailed feedback to enable the candidate to develop a revised version.

Your thesis evaluation will be made available to the Dean of Research and is used to decide whether the PhD candidate can be allowed to defend the thesis. Moreover, the Dean will use your evaluation to decide whether the PhD thesis should be considered for a cum laude designation in which case two additional reviewers (external experts) will review the thesis. In addition, directly after the public defence of the thesis, the committee will discuss the quality of the thesis and the defence in a joint meeting chaired by the (deputy) Rector Magnificus and here your anonymized evaluation report will be used as starting point for the discussion. Your anonymized thesis evaluation report will only be disclosed to fellow committee members when the PhD thesis is considered for a cum laude.

The (co-)promotor(s) will receive your anonymised thesis evaluation report:

- in case the thesis is graded as 'unacceptable', to allow the candidate to improve the thesis. Your comments and reasons for your judgement are important as the candidate has the possibility to revise the thesis and/or provide a rebuttal;

- immediately after the defence, as feedback to the (co-)promotor(s) regarding the quality of this thesis and to clarify the expectations for possible next PhD theses under her/his supervision.

There is insufficient time for the candidate to make major revisions based on your comments in case he/she is allowed to defend the thesis. However, if you identify grammatical, formatting or other minor errors, your suggestions for correction of these errors will be forwarded to the (co-)promotor(s), who will then confer with the PhD candidate whether or not to incorporate your suggestions in the thesis.

### Requirements for the degree of doctor awarded by Wageningen University

In order to be awarded the degree of doctor, the candidate must have demonstrated the capability of:

- 1. functioning as an independent practitioner of science who is able to:
  - a. formulate scientific questions, either based on social issues or scientific progress;
  - b. conduct original scientific research;
  - c. publish articles in peer-reviewed scientific journals, publish books with scientific publishers or make a technical design;
- 2. integrating her/his research in, or placing it within the framework of, the own scientific discipline and against the background of a broader scientific area;
- 3. placing the research aims and research results in a societal context;
- 4. postulating concisely worded propositions in scientific and societal areas, formulated in such a way that they are subject to opposition and defence.

# Your evaluation of the PhD thesis

Name of the PhD candidate :  Planned date of the public defence :	
Planned date of the public defence :  Title of the PhD thesis :	
Note: After the public defence your anonymised evaluation form will be provided to the promotor	r <u>.</u>
1. Originality of the research	
Grade: unacceptable / acceptable / satisfactory / good / very good / excellent	
Reason for your evaluation (25-100 words):	
2. Scientific quality of the research chapters	
Grade: unacceptable / acceptable / satisfactory / good / very good / excellent	
Reason for your evaluation (25-100 words):	
3. Reflection on the research as shown in the 'Introduction' and 'General discussion'	
Grade: unacceptable / acceptable / satisfactory / good / very good / excellent	
Reason for evaluation (25-100 words):	
4. Quality of written presentation	
Grade: unacceptable / acceptable / satisfactory / good / very good / excellent	
Reason for your evaluation (25-100 words):	
5. Overall assessment (based on the above evaluation categories 1 – 4)	
Grade: unacceptable / acceptable / satisfactory / good / very good / excellent	
Reason for your evaluation (25-100 words):	

#### Your conclusion - should the candidate be allowed to defend the thesis?

The PhD candidate will only be allowed to defend the thesis if none of the above criteria are marked as 'unacceptable'. In the case of a 'unacceptable' score, please provide your arguments for that qualification in the box below. The anonymized evaluation form will be forwarded to the candidate's promotor who will request the candidate to improve the manuscript. The revised version of the manuscript, with a letter explaining the changes made, will be evaluated by the member(s) of the thesis committee that scored the thesis as 'unacceptable' on any of the five criteria. In case the changes to the thesis are substantial, the other members of the thesis committee will be informed about the changes but will not be asked to re-evaluate the thesis.

I propose that the PhD candidate can defend the thesis: Note: this statement <u>must</u> be answered!	yes / no
Reasons in case you propose the candidate cannot defend the thesis (25-100 words):	

Keep on a separate page so	that the form can be anonymised easily
Name of the committee mem	nber:
Chair / Function / Affiliation	<b>:</b>
Date	1

Please e-mail the completed form to  ${\color{red} \underline{\bf promovendi@wur.nl}}$ 

## Rubric for evaluation of a PhD thesis

Criteria	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
1. Originality of the research <sup>i</sup>	Does not make a contribution, either because it is a copy, or nearly so, of work done before by others, or because the research question is trivial.	Makes a small and not very original contribution, uses a cookbook approach, is not really interesting but shows the ability to do research.	Makes a modest contribution by addressing a relevant, but small and traditional question that is interesting for those who work on the same subject.	Makes a substantial contribution by addressing a relevant question that is interesting for others within the field. Is a solid part of normal science but does not open up the field.	Makes an important contribution by solving an old problem in a new way, or by addressing a new and relevant question, however without completely exploring and solving that new question.	Makes an exciting, major contribution, either by solving an old problem in a brilliant, innovative way or by asking and answering a new and intriguing question.
2. Scientific quality of the research chapters <sup>ii</sup>	Chapters lack the scientific quality to be publishable in any reputable journal or by any reputable book publisher.	Chapters lack clear cohesion and/or show variable quality.  One or two chapters have the quality to be publishable in low-ranking journals or as part of a larger book, but will probably remain uncited.	Chapters have sufficient cohesion and quality to address the research question.  Most chapters are publishable in low-ranking journals or by a low-ranking book publisher and may receive few citations.	Most chapters are published or likely to be published in reputable journals, and may become cited within the field. If a monograph, the thesis may be interesting for a reputable publisher.	All or most chapters are published or likely to be published in the upper range of journals in the field, likely to become well cited within the field. If a monograph, the thesis will certainly evoke interest from reputable publishers.	All or most chapters are published or likely to be published in top journals in the field, likely to become well cited within and outside the own field. If a monograph, top publishers will like to publish it.
3. Reflection on the research as shown in the 'Introduction' and 'General discussion'	The thesis does not clearly describe what the candidate has done and why.	The thesis describes in a simple way what the candidate has done, but not why.	The thesis describes adequately what the candidate has done, but hardly, or unclear, why this was done.	The thesis describes clearly what the candidate has done, but less clearly why this was done.	The thesis describes clearly what the candidate has done and why.	The thesis shows clearly, compellingly and critically what the candidate has done and why.
	Candidate cannot show how the results fit in the existing knowledge, or what the social impact is.	Trivial reflection on how results fit in the existing knowledge and what the social impact is.	Narrow view on how results fit in the existing knowledge and what the social impact is.	Obvious correspondences and conflicts with existing knowledge are identified. Most obvious social impact is indicated.	Most correspondences and conflicts with existing knowledge are identified. Most social impact is indicated.	Results are critically confronted with existing knowledge. Possible social impact is addressed in full.
	Possible weaknesses in the research are not discussed.	The most obvious weaknesses in the research are indicated, but not how they affect the conclusions.	Most weaknesses in the research are indicated, but less clearly how they affect the conclusions.	Most weaknesses in the research are indicated, and how they affect the main conclusions.	All weaknesses in the research are indicated, and how they affect the main conclusions.	All weaknesses in the research are indicated, and how they affect each of the conclusions.

Criteria	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
4. Quality of the written presentation	Writing, figures and lay-out are so poor that it is hard to understand what the candidate wants to say. Reading is very difficult.	Writing, figures and lay-out are not always correct and clear, level of detail varies widely, but with effort the text is understandable.  Reading is difficult.	Writing, figures and lay-out are mostly adequate, but level of detail varies and text could be more concise. Reading is laborious.	Writing is correct and mostly clear, but text could be more concise. Figures and lay-out are mostly clear, with few flaws.  Reading is effortless.	Writing is clear and concise, figures and lay-out are functional and flawless. Reading is a joy.	Writing is crystal clear and compelling, concise but balanced with sufficient detail, with attractive, functional figures and layout. Reading is exciting.
	The thesis is badly structured, often information is missing or presented at the wrong place.	Main structure of the thesis is adequate, but placement and structure of sections are often not logical.	Main structure of the thesis is correct, placement and structure of sections are not logical in places.	Main structure of the thesis is correct, but some sections are less well placed or less well structured	Main structure of the thesis is clear and correct, most sections are well structured and well placed.	The thesis is very well structured with each chapter and section having a clear function and presented in a logical order
5. Overall assessment	Based on the above categories the overall quality of the thesis is considered poor.	Based on the above categories the overall quality of the thesis is considered acceptable.	Based on the above categories the overall quality of the thesis is considered satisfactory.	Based on the above categories the overall quality of the thesis is considered good.	Based on the above categories the overall quality of the thesis is considered very good.	Based on the above categories the overall quality of the thesis is considered excellent.
	In case one of the five criteria is marked as 'unacceptable' by any of the opponents/ reviewers, the PhD candidate will not be allowed to defend the thesis without major revision.	The PhD candidate will be allowed to defend the thesis.	The PhD candidate will be allowed to defend the thesis.	The PhD candidate will be allowed to defend the thesis.	The PhD candidate will be allowed to defend the thesis.	This PhD thesis belongs to the top of the scientific field. This may be a reason for awarding the designation 'cum laude'  ('with distinction') <sup>ii1</sup> .

In case a thesis reports interdisciplinary or applied research, please consider the contribution to the interdisciplinary or applied field rather than to each of the underlying disciplines. In the case of a design, please consider the originality of the design and the contribution to technology. Consider the candidate's technological competence, application of design methodologies, and analytical and integrative skills.

If the research chapters are multi-authored, it is important to consider the candidate's contribution to each chapter, in particular when s/he is not the first author. To this end, an authorship statement by the

<sup>&</sup>quot;If the research chapters are multi-authored, it is important to consider the candidate's contribution to each chapter, in particular when s/he is not the first author. To this end, an authorship statement by the candidate has been added to the thesis manuscript. Also, it is good to check whether the research chapters show a level of written presentation similar to the Introduction and General discussion of the thesis. If the quality of the written text in the research chapters is much better, this may result in a higher grade for the criterion 'research chapters' but it indicates an important contribution of co-authors. Thus, a higher grade for the 'research chapters' in the thesis alone should perhaps not be reflected in the overall grade of the thesis.

in After the oral defence, the committee will be asked to comment on the quality of the defence. At that point the final decision whether or not to award a cum laude designation is made by anonymous voting.