

## EVALUATION FORM Mathematics Thesis

### Project Details

· Bachelor thesis   · Master thesis		
<b>Student name:</b>	<b>Student number:</b>	<b>Date:</b>
<b>Supervisor:</b>	<b>Second reader:</b>	
<b>Title:</b>		

### Guidelines for rubric

- For each component, score the student with the performance level that best summarizes the demonstrated level of the student.
- Comments are optional, except for the justification in the Grading section.
- If the student fails the plagiarism-check or scores 'Insufficient' on Research context or Mathematical content, the final grade should be 'Insufficient'.

### Guidelines for determining the final grade

Use the following indicative table to convert the total score to a grade. For a second reader it will be impossible to score the components of Research Process; these should be skipped. The final grade should reflect the scores for the components and the written comments; there is some leniency to account for the needs of the research field and the uniqueness of the project and the student.

<i>supervisor</i>	<b>Grade</b>	<i>second reader</i>
< 5 points	Insufficient	< 3 points
5–8 points	6–7	3–5 points
8–12 points	7–8	5–7.5 points
12–15 points	8–9	7.5–10 points
15–18 points	9–10	10–12 points

## Research Process

(To be filled in by the daily supervisor. In case the daily supervisor is not an examiner, input on these aspects should be provided to the RU supervisor)

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 1p</b>	<b>Good - 2p</b>	<b>Excellent - 3p</b>
<b>Personal development and attitude</b>	<i>understanding the material:</i>	The student fails, despite guidance from the supervisor	The student studies literature with guidance from the supervisor	The student independently studies literature	The student independently finds and studies literature
	<i>critical arguments about the results, literature or specialists:</i>	fails to understand	understands those of supervisor	joins the supervisor in discussing	comes up with their own
	<i>taking responsibility for the project and working independently; handling data (if applicable):</i>	takes no responsibility, shows no independency, unreliable handling.	takes responsibility, works semi-independently, clearly needing supervision, handles data quite reliably	takes responsibility, works independently with some need of supervision, handles data in a reliable manner	takes responsibility for the project and works independently, and if applicable, handles data in a reliable manner
	<i>communication with supervisor, planning meetings, leading discussions:</i>	communicates badly, plans inconsistently, no participation.	communicates well, plans consistently, lets the supervisor lead the discussion	communicates well, plans consistently and actively participates	communicates well, plans consistently and takes initiative
N/A, I am the second reader					
<b>Comments:</b>					

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 1p</b>	<b>Good - 2p</b>	<b>Excellent - 3p</b>
<b>Math. development</b>	<i>comprehensive understanding of the subject, given its difficulty</i>	The student failed to develop this	The student developed this	The student developed this, in its broader context	The student developed this, in its broader context
	<i>understanding and reproduce the mathematical theories used</i>	failed	did this while closely supervised	did this, with some guidance	did this with relatively little guidance
	<i>development of practical (experimental/computer) skills (if applicable)</i>	not enough	developed good skills for the project	developed good skills for the project	developed good skills and took initiative for improvement
N/A, I am the second reader					
<b>Comments:</b>					

## Thesis

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 1p</b>	<b>Good - 2p</b>	<b>Excellent - 3p</b>
<b>Research context</b>	<i>Formulation and motivation of main mathematical questions is</i>	inappropriate or lacking	appropriate and well-motivated	clearly stated, properly motivated and importance in the field is made clear	clearly stated, properly motivated and importance in the field is made clear
	<i>New concepts, theorems and techniques are put in context</i>	poorly, without understanding of own results; no consequences, open questions or future potential mentioned	well; student demonstrates understanding of own results	well, and included is a discussion of consequences, open questions or future potential	well and included is a discussion of consequences, open questions or future potential
	<i>The approach is</i>	unclear or illogical	logical	clearly outlined and appropriate	clearly outlined and well-chosen
	<i>Relevant literature is</i>	missing	included with a good selection	included in a varied selection, searched for by the student with guidance from the supervisor	included in a varied and well-rounded selection, independently found by the student
<b>Comments:</b>					

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 1p</b>	<b>Good - 2p</b>	<b>Excellent - 3p</b>
<b>Math. content</b>	<i>Overview of prior knowledge is</i>	inadequate; crucial elements are missing	is given. However, some elements are missing	is given with relevant literature	given with relevant literature and interesting insights
	<i>Discussion of the subject is</i>	weak, relevant elements are missing	given in full	given, complete and in-depth	given, complete and in-depth
	<i>Creativity of the work (given the difficulty of the subject) is</i>	lacking; it is not appropriate for the audience level	adequate, but it could have been better adjusted to audience level	good, moreover, it is adjusted to the audience level	good and it is well-adjusted to the audience level
	<i>The proofs and discussion are</i>	lacking in some respects; they demonstrate a weak understanding of the mathematical context	correct but could be elaborated on more; they demonstrate a general understanding of the mathematical context	correct and complete; they demonstrate a general understanding of the mathematical context	correct and complete, show independence and demonstrate a thorough understanding of the mathematical context
<b>Comments:</b>					

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 1p</b>	<b>Good - 2p</b>	<b>Excellent - 3p</b>
<b>Writing, style and math. exposition</b>	<i>The style of writing is</i>	not suitable, the thesis contains a large number of spelling or grammatical errors. Focus often drifts from the subject	suitable, but sometimes inconsistent, but creates a decent flow. The thesis contains only few spelling or grammatical errors.	suitable and has a good flow, the thesis contains only few spelling or grammatical errors	suitable and has a good flow, the thesis contains at most a few spelling or grammatical errors
	<i>Layout and organization</i>	are of poor quality	have some small shortcomings	benefit the reader	benefit the reader
	<i>Proofs and mathematical discussions</i>	are of poor quality	have some small shortcomings	are well organized and well written	clearly organized and well written
	<i>Theorems, propositions and lemmas</i>	are poorly chosen	have some small shortcomings	are well chosen	are well chosen, clear, and judiciously placed
	<i>Examples</i>	are absent or irrelevant	are reasonably chosen, but better choices were available	are well chosen	are well chosen, clear, and judiciously placed
	<i>Tables, figures and diagrams (if present) are</i>	not correctly presented and of poor quality	properly presented and of acceptable quality	clearly presented, self-explaining and of good quality	clearly presented, self-explaining and of high quality
<b>Comments:</b>					

## Presentation

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 0.5p</b>	<b>Good - 1p</b>	<b>Excellent - 1.5p</b>
<b>Content</b>	<i>The selection of topics and examples made by the student was</i>	weak; the presentation was missing parts or did not match the audience level	reasonable; however, sometimes the choices did not match the audience level	reasonable, taking into account the audience level	good, taking into account the audience level
	<i>Organization and coherence of the presentation</i>	could have been better; there were many shortcomings	was well enough to give a nice flow, but there were some shortcomings	was well enough to give a nice flow	was good, giving a good flow and a sense of direction
	<i>The main mathematical questions, their context and link to the research carried out</i>	were absent or confusing	were reasonably explained	were reasonably explained	were clearly explained
	<i>Answers by the student to questions were</i>	inadequate	mostly adequate	satisfactory, insightful and mostly to the point	satisfactory, insightful and to the point
N/A, I did not attend the presentation					
<b>Comments:</b>					

	<i>aspect</i>	<b>Insufficient - 0p</b>	<b>Satisfactory - 0.5p</b>	<b>Good - 1p</b>	<b>Excellent - 1.5p</b>
<b>Presentation skills</b>	<i>Interaction of the student with the audience was</i>	not good	well enough, but could still improve	good	good
	<i>The student spoke</i>	not understandably	understandably	understandably	understandably and maintained the attention of the audience
	<i>The choice of blackboard/beamer and its use were</i>	poor and did not benefit the presentation	good	good	fine
	<i>The choice of figures and diagrams (if applicable)</i>	could have been better	was well enough, but they could have been placed better	good	good
	<i>Time management: the student was</i>	not sufficiently aware of the time	aware of the time, but could have used it better	aware of the time and made good use of it	aware of the time and made good use of it
N/A, I did not attend the presentation					
<b>Comments:</b>					

## Grading

Supervisors comments, justification of grade:

Combined Total Score: \_\_\_\_ points

**Final Grade:** \_\_\_\_