

To the  
 Degree Committee  
 MSc Biological Sciences  
 University of Cologne  
 Zùlpicher Straße 47a  
 50674 Cologne



**Master’s Thesis Evaluation**

**Thesis Title:**

**Name of student:**

**Name of reviewer:**

*The evaluation process has three steps. (1) You grade each component of the thesis in the tables. (2) You write a short statement on main reasons for your grades. (3) You give an overall grade.*

**1. Thesis component grading**

*(Just check boxes, no numbers. See pp 3, 4 for detailed evaluation criteria.)*

<b>A. Content and organization</b>	<b>very good</b>	<b>good</b>	<b>satisfactory</b>	<b>sufficient</b>	<b>fail</b>
Abstract					
Introduction					
Material and Methods					
Results					
Discussion					
Figures and Tables					
References					
Structure, style and language					

<b>B. Intellectual quality</b>					
Intellectual quality					
Scientific value					

<b>C. Performance</b>	<b>very good</b>	<b>good</b>	<b>satisfactory</b>	<b>sufficient</b>	<b>fail</b>	<b>not applicable</b>
Lab work / Comput. analysis work						
Independence						
Intellectual contribution						

**2. Short statement on main reasons for your overall grading.**

*Please avoid extensive summary of thesis content. Please explain weighting/importance of specific components. Write in English or German, max. 32 lines.*

**Overall grade<sup>1</sup>:**      *(use decimal point)*

**Grading scale:**

- 1.0 – 1.5 (very good)
- 1.6 – 2.5 (good)
- 2.6 – 3.5 (satisfactory)
- 3.6 – 4.0 (sufficient)
- 5 (fail)

(Date)

\_\_\_\_\_  
(Signature of Reviewer)

*Use digital signature or print out and sign*

<sup>1</sup> The overall grade is not an average of the component evaluations but depends on the weighting of the different components by the reviewer.

## Evaluation Criteria

### A. Content and Organization

#### Abstract

- Are the main purpose or objective and hypothesis stated?
- Are the main results summarized?
- Are the major points from the discussion/conclusion summarized?

#### Introduction

- Is the structure logical and properly ordered? Is the problem or issue identified?
- Is the necessary background information (i.e., relevant literature) provided?
- Is the statement of purpose and/or hypothesis well explained?

#### Material and Methods

- Are materials and methods sufficiently described and all necessary references provided to allow independent replication of the experiments?

#### Results

- Are the questions that are addressed clearly stated? Are experimental and/or methodological approaches addressed?
- Are the results presented in logical order?
- Are the results supported by meaningful figures or tables and all necessary details described?
- Are the numbers of independent experiments sufficient to support conclusions, and (if applicable) were the necessary statistical tests performed?

#### Discussion

- Are the main results stated and then discussed point by point?
- Are discussion statements not mere repetitions of the introduction and/or results?
- Is the interpretation of results supported by data and (if relevant) are methodological constraints and problems critically discussed?
- Are results compared to the relevant literature and/or theory?
- Are conclusions drawn and an outlook given?

#### Figures and Tables

- Are figures logically composed, self-explanatory, and properly labeled?
- Are the titles and legends/footnotes of the figures and tables self-explanatory and clear?
- Are all tables and figures adequately numbered and introduced within the text?

#### References

- Is the reference list complete and properly formatted?

#### Structure, style and language

- Is the thesis properly structured and contains all necessary chapters, incl. cover page and declaration of independence?
- Is the writing concise and clear, are the spelling and grammar correct, and is the scientific language and terminology adequate?

## **B. Intellectual Quality**

### Intellectual quality

- Did the student appear to comprehend the intellectual framework of her or his thesis project?
- Did the student appear to understand the implications of his or her conclusions and statements?
- Did the student articulate general implications beyond the scope of the Thesis?

### Scientific value

- Are the results of the thesis of especial scientific value?
- Are the results of the thesis an important basis for follow up experiments?

## **C. Performance**

### Lab work / Computational analysis work

- Did the student document experimental procedures and/or computational work and/or field work and the results of that work accurately?
- Did the student perform her or his experimental work efficiently?
- Were the practical skills and troubleshooting abilities of the student adequate?
- Did the student observe safety procedures adequately?

### Independence

- Did the student perform experiments independently after adequate instruction?
- Did the student plan experiments independently after adequate instruction?
- Did the student develop an efficient daily routine?
- Did the student propose or perform additional experiments independently or did she/he merely wait for instructions?
- Did the student propose improvements or modifications of the experimental design?

### Intellectual contributions

- Did the student produce valuable ideas and contribute intellectually to solving scientific problems?