Introducing new grade descriptions for Master's projects

Today's letter-based grading system was introduced in 2003. The scale runs from A to F, and a qualitative description of each grade is available. During the period following its introduction, the way in which the grade scale was applied has been monitored. On both a national basis and at the University of Oslo, it has become apparent that the majority of Master's projects are graded with either A or B. Despite a focus on this matter from both the Norwegian Association of Higher Education Institutions (UHR) and UiO, the same tendency remains apparent today.

Several steps have been taken to improve the use of the whole range of grades. In 2009, the National Conference of Faculties for Natural Sciences (Nfmr) and the National Council for Technological Education (Nrt) decided to develop standard grade descriptions for Master's projects in the fields of Mathematics, Natural Sciences and Technology (MNT). A working group was drawn up and received the mandate to develop generic grade descriptions for Master's projects, Assessor and Supervisor assessments\(^1\), and standardised Assessor forms based on the new grade descriptions. A prerequisite was that the grade descriptions be based on the national qualifications framework. The working group was led by Professor Carl Henrik Gørbitz from the Department of Chemistry, UiO. Their proposal was presented in 2011 and unanimously endorsed by Nfmr and Nrt, cf. http://www.uib.no//filearchive/filetopic_masteroppgaver-mnt-rapport.pdf. It was agreed that the new grade descriptions should be applied to the grading of MNT Master's projects submitted by students who began their courses in the Autumn semester of 2012. The new grade descriptions are thus endorsed by all centres of higher education offering Master's degrees in MNT subjects, and not restricted to use by UiO.

The new grade descriptions are also endorsed by student representatives from Nfmr and Nrt, who consider it a positive development that in the new system, the whole grade scale can be used and that the grade categories are evenly distributed.

The Faculty of Mathematics and Natural Sciences at UiO has passed a resolution in line with the recommendations from Nfmr and Nrt. In December 2013, Vice Dean, Solveig Kristensen, established a working group consisting of Jaan Erik Roots from the Department of Chemistry (Leader), Solveig Kristensen (Vice Dean), Tom Lindstrøm (Department of Mathematics), Dag Langmyhr (Department of Informatics), Øystein Bergkvam (Faculty of Mathematics and Natural Sciences, Administration) and Jørgen Eriksson Midtbø (student representative). Their task has been to synthesise the recommendations with UiO's regulations and routines, and suggest adjustments in routines where this is seen to be necessary, thus enabling Master's projects submitted on April 1, 2014 or later to be evaluated according to the new grade descriptions.

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\(^1\) Cf. Appendix 1: Generic grade descriptions for Master's work/ Master's projects
New diplomas and grade certificates

As of Spring 2014, all institutions that use FS (a standard student administration system for Norwegian universities and university colleges) will start using new templates for diplomas and grade certificates. The new grade descriptions will apply to all Master's certificates that document attainment of a Master's degree after April 1, 2014. Certificates will also state the aggregate grade statistics during a 5-year period for each theoretic subject and for all Master's projects with the same subject code, presented as a bar chart in the right-hand margin. The bar charts will show the overall distribution of the grades A - E. If the grading of Master's projects in a particular study programme continues to be dominated by grades A and B, this will be apparent in these diagrams. Those who have read the grade descriptions will find it questionable that Master's candidates have primarily submitted projects that are assessed as being of extremely high standard and better than average achievement. In time, this would affect the impression of UiO as a trustworthy educational institution. It is therefore in the best interests of all the educational institutions to apply the new recommended grade descriptions.

Assessing Master's projects

Master's projects shall be evaluated by a committee consisting of one external assessor and one internal assessor. The Act relating to Universities and University Colleges § 3-9(2) stipulates that Master's projects be assessed by at least two assessors, one of whom must be external. The definition of external is a person not currently employed at the institution, nor employed at UiO during the past two years. In accordance with the regulations, two external assessors are permitted, but this is not considered to be ideal since an internal sensor will be better able to maintain a coordinated application of the grade scale in the assessment of Master's projects. All academic staff in permanent positions may, in principle, have the role of an internal assessor. This also applies to permanently employed academic staff from other entities at UiO as long as they have a relevant academic background. The Head of Education may also appoint internal assessors from other employment groups. The working group recommends that the Head of Education appoints a pool of internal assessors, and that the internal assessor for a specific Assessment Committee is appointed from this pool. The internal assessor must be knowledgeable about the topic of the Master's project, but may not have supervised the candidate and preferably not be in the same research group as the supervisor/candidate. The pool of internal assessors should not be too large, but this depends on conditions at the specific Department. All assessors in the pool are responsible for being familiar with the criteria for the new grade descriptions for Master's projects. External and internal assessors have equal responsibility for setting grades. In principle, the external assessor is the specialist, whereas the internal assessor should focus more on grading the project in accordance with the grade descriptions and in line with the grading of other projects. The Supervisor is not involved in setting the grade, but has a supplementary function to the internal and external assessors. This function entails providing the assessors with information.

Cf. Appendix 2: Excerpt from a grade certificate.
about the student’s study technique, effort and ability to work independently. The functions of
the various persons involved in the Master’s degree examination procedure can be presented
schematically as follows:

<table>
<thead>
<tr>
<th></th>
<th>External Assessor</th>
<th>Internal Assessor</th>
<th>Supervisor</th>
<th>Student</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial meeting</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>Examination</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>Final meeting</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>v</td>
<td>v</td>
<td>v†</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>Announcement</td>
<td>v</td>
<td>v</td>
<td>v†</td>
<td>v</td>
<td>v</td>
</tr>
</tbody>
</table>

1) The Supervisor may decide whether or not to be present for the announcement of the
grading.

At the initial meeting, the Supervisor submits information about the candidate. After the
viva/examination, the External Assessor, Internal Assessor and Supervisor attend a final
meeting. Following this, the External and Internal Assessors meet alone to determine the
grade for the Master’s project and the final grade on the candidate’s certificate. Finally, the
candidate is informed of the grade supported by a brief oral explanation.

Master’s projects are assessed in accordance with Assessor's Assessment of Master's Projects
and Supervisor's Assessment of Master’s Projects. The Working Group recommends that
assessors and supervisors use the following forms: Assessment Form for Assessors and
Assessment Form for Supervisors, but notes on the project may also be made by other means.
The Assessment Form for Grading contains information on the different criteria for
evaluating the project, and is intended to support the Assessors in the grading process. This
form has the same structure and colour coding as the Assessor's Assessment of Master's
Projects. Master’s projects should be evaluated according to all the criteria set out in the
Assessor's Assessment of Master’s projects. The criteria grouped first in these guidelines
should be given first priority, followed by those grouped second, and finally the two criteria at
the end of the list. These guidelines are excerpted from Grade Descriptions for Master's
Projects.

The Faculty will produce a standardised Assessor Protocol Form to be used by all
Departments. If working forms or other notes resulting from the examination are sent to the
Department/Faculty together with the Assessor Protocol Form, these are by definition official
documents, in accordance with the Public Administration Act. Candidates have the right to
see such documents. If Assessors and Supervisors store documents on their own computer or

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3 Cf. Appendix 5: Assessor's Assessment of Master’s projects
4 Cf. Appendix 6: Supervisor’s Assessment of Master’s projects
5 Cf. Appendix 3: Assessment Form for Assessors (working document)
6 Cf. Appendix 4: Assessment Form for Supervisors (working document)
7 Cf. Appendix 7: Assessment Form for Grading
8 Cf. Appendix 8: Assessor Protocol for Master’s Projects at the Faculty of Mathematics and Natural Sciences, UiO
in their own office, these documents are not considered to be official, and candidates are not entitled to see them after the examination.

The Working Group recommends that the Supervisor's assessment/description of the candidate's study technique, effort and ability to work independently be allowed to affect the grade for the written project. The Assessors assess the written project as seen, and consider any supplementary information provided by the Supervisor. This provides the foundation for assigning a grade for the written project. This grade should be registered as a separate partial grade in FS, the standard student administration system, and will be visible to the candidate. Following the viva, the grade may be adjusted if necessary, and this will be registered as the final grade for the project. In other words, two grades are recorded in FS. The reason for recording both grades is that should a candidate appeal the result, the grade originally assigned to the written project must be known. This is discussed in more detail below.

In accordance with Regulations concerning courses, modules and degrees at the Faculty of Mathematics and Natural Sciences, candidates may apply for part-time study, a period of leave, or a deadline extension. Applications are considered by the Programme Board. Candidates submitting a short Master's project may only take the theoretical part of the programme on a part-time basis. The project must be submitted within 17 weeks, plus extra days to compensate for public holidays for Easter, Ascension Day, May 1, and May 17 during the Spring semester. Candidates submitting a long Master's project may apply to study part-time for their Master's project. If part-time study, leave of absence or an extension is granted, a new deadline must be agreed upon.

If a candidate fails to submit on time, the Head of Education decides whether or not the Master's project may be assessed. If there is a valid reason for being unable to meet the deadline, the Candidate must notify the Head of Education as soon as possible, and the situation must be documented. A valid reason could be unforeseen problems concerning the project, or documented sickness.

**Grade appeals for Master's projects**

Students are entitled to appeal an assessment, but only assessment of work that may be checked. This is stipulated in the Act relating to Universities and University Colleges § 5-3 (5): «Appeals may not be lodged against marks awarded for oral performance and assessment of practical training or the like which, owing to the nature of the test cannot be reviewed.»

A Master's degree examination consists of both a written part and an oral presentation/viva. It is important to keep these two parts separate since the candidate is only entitled to appeal the written part of the examination. In 2009, the Director of Academic Affairs at UiO sent a letter to all the Faculties reminding them of this. The letter refers to § 3-9(5) of the Act relating to Universities and University Colleges «If the final mark is set on the basis of both a written

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9 Appendix 9: Copy of letter from Director of Academic Affairs concerning the regulations for grade adjustment on the basis of a viva
and an oral test and an appeal against a mark for the written part of the examination is upheld, a new oral test shall be held to determine the final mark.» This means that a separate grade must be given to the Master's project. If the oral presentation/viva provides grounds for adjusting the grade, this will be apparent in the final grade. Some examples follow:

<table>
<thead>
<tr>
<th>Master's project grade</th>
<th>Grade after oral presentation/viva</th>
<th>Diploma grade: C</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

In this example, the Master's project was assessed as a weak B. Had the candidate given an outstanding oral presentation/viva, the grade B would have been maintained. However, since the candidate gave a poor oral presentation/viva, the final grade was lowered to C.

If a candidate wishes to appeal a grade, the members of the new Assessment Committee will reassess the grading of the written project only. Since the Supervisor's comments on the candidate's study technique, effort and ability to work independently may also affect the assessment of the written project, the new Assessment Committee must receive the same information from the Supervisor as the first Assessment Committee. If the new Assessment Committee also gives the Master's project a grade B, the situation remains unchanged with respect to the conclusions of the original committee, and the final grade C remains. A new oral presentation/viva is not permitted.

If the new Assessment Committee assesses the Master's project as grade C (possibly almost a B), i.e. a lower grade than the original Assessment Committee, a new oral presentation/viva must take place. If the candidate then gives an extremely good presentation/viva, that is assessed as improving the grade, the final grade will become B. This may be represented as follows:

<table>
<thead>
<tr>
<th>Master's project grade</th>
<th>Grade after oral presentation/viva</th>
<th>Diploma grade: B</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>
It may seem strange that the new Assessment Committee can give the project a lower grade than the original committee, and yet the final grade is higher. However, this is a possible outcome when both the candidate's right to appeal is maintained, and UiO meets the requirements of the Act relating to Universities and University Colleges that vivas may not be appealed. Such a situation will rarely occur, but is possible.

On the final Diploma certificate, there will only be one grade. In the above examples, the grade on the Diploma certificate will be C in the first case and B in the second. However, both the grade for written work and the final grade will be available on StudentWeb. This is because the candidate must know the grade for the project in order to be able to appeal.

Appendices

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