Staff guide to the forthcoming changes to the degree algorithm: Undergraduate courses

This document provides an outline of the forthcoming amendment to the change in the algorithm used for the determination of final degree classifications for undergraduate courses. The guide provides the rationale for this change, explains how it will work, and when it will be implemented.

1. Background

NTU has been using a grade-based approach to assessment for all courses since 2013. The next phase of enhancements to the assessment framework is currently underway.

These enhancements have been designed to:

- improve the transparency of assessment (for students, staff and external examiners);
- further support academic staff in placing emphasis on assessment of learning outcomes;
- ensure decisions about final degree classification reflect NTU values about student achievement.

2. What we are trying to achieve

The model for degree classification determination has been tested against two important values which describe how student achievement is rewarded at NTU through our classification system. These can be summarised as:

1. Students may demonstrate a level of performance in different ways across a course of study.
2. Students may experience a dip in an individual assessment piece and this should not in itself limit the final classification.

An additional principle that has been agreed when defining the model is that we adopt the simplest system at all stages. This will help to ensure that we maintain transparency and consistency.

3. The model

Under the current regulations the weighted arithmetic mean of level 6 module grades and, in most cases, a contribution from level 5 module grades is used to calculate undergraduate students’ final award classification. The new algorithm provides for a student’s final classification to be based on what grade they have achieved in the majority of their modules (irrespective of the weighted arithmetic mean). A student’s final degree classification is determined by either the weighted arithmetic mean of the contributing grade points (as now), or by the majority grade, whichever results in the higher outcome – as below:

Final classification of the award is determined by the better of either:

(a) the weighted arithmetic mean of level 5 and level 6 modules, or where level 5 is not specified as contributing to the final award, the weighted arithmetic mean of level 6 modules (this is current practice, automatically calculated by Banner) or

(b) the majority grade of level 5* (where level 5 is specified as contributing to the final award) and level 6 modules, where the majority grade is calculated on the basis of more than half of the credits which contribute to the award achieving a particular classification or higher.

* the level 5 contribution to this majority calculation is the level 5 grade (see paragraph 4 for an explanation of how this is achieved.)
4. What we mean by the ‘majority grade’

The majority grade is determined by establishing the highest degree classification at which more than half the credits have been achieved. For example, for a student’s majority grade to be a first class, then more than half the credits need to have been graded at a first; similarly for a student’s majority grade to be an upper 2nd, then more than half the credits must have been graded at an upper 2nd or higher.

For courses which require that level 5 credits contribute to the final degree classification, the overall level 5 arithmetic mean will be used to represent the equivalent of 20 level 5 credit points in a total of 140 credits. Therefore, for a student’s majority grade to be first class, they need to have been awarded first class grades in over 70 credits (from a total of 120 credits from level 6 and 20 credits from level 5).

Some examples of majority grade calculation are shown below:

<table>
<thead>
<tr>
<th>Level 6 module 1</th>
<th>Level 6 module 2</th>
<th>Level 6 module 3</th>
<th>Level 6 module 4</th>
<th>Level 6 module 5</th>
<th>Level 5 arithmetic mean</th>
<th>Majority grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 cp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student A</td>
<td>Low 1st</td>
<td>Mid 2:1</td>
<td>High 1st</td>
<td>Mid 2:1</td>
<td>High 1st</td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student B</td>
<td>High 2:1</td>
<td>Mid 2:2</td>
<td>Low 2:1</td>
<td>Mid 2:2</td>
<td>Low 2:2</td>
<td>2:2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student C</td>
<td>High 2:1</td>
<td>Low 2:1</td>
<td>Mid 2:2</td>
<td>Mid 2:2</td>
<td>High 2:1</td>
<td>2:1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student D</td>
<td>Low 1st</td>
<td>High 2:1</td>
<td>High 2:1</td>
<td>High 1st</td>
<td>High 2:1</td>
<td>2:1</td>
</tr>
</tbody>
</table>

A similar approach is taken for level 4 for foundation degrees and level 6 for integrated master’s degrees.

5. Outcomes of the algorithm

As explained in section 3 above, the majority grade will be compared with the weighted arithmetic mean of level 5 and level 6 modules (or where level 5 is not specified as contributing to the final award, the weighted arithmetic mean of level 6 modules) to give the final degree classification.

For the students above, this would look as follows:

<table>
<thead>
<tr>
<th>Majority grade</th>
<th>Weighted arithmetic mean</th>
<th>Final degree classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>1st</td>
<td>2:1</td>
</tr>
<tr>
<td>Student B</td>
<td>2:2</td>
<td>2:2</td>
</tr>
<tr>
<td>Student C</td>
<td>2:1</td>
<td>2:1</td>
</tr>
<tr>
<td>Student D</td>
<td>2:1</td>
<td>1st</td>
</tr>
</tbody>
</table>

6. Implications

There are several implications to the change in the algorithm. The most significant of these are as follows:

- The new algorithm will mean that there will no longer be any ‘borderline’ cases that need specific attention at the Board of Examiners. This means that any course or School conventions for decision-making at the borderline will not need to be in operation.

- The examination board spreadsheet will be developed in order to ensure that boards have the appropriate information about student grades (including sub-element performance) and it provides a clear recommendation about the final classification based on the new algorithm.

7. Implementation dates

The change to the degree algorithm will be implemented at final Boards of Examiners in 2018/19. For students graduating this summer (2017) and next summer (2018), the current percentage-based algorithm will continue to be used.

We will communicate the new algorithm to all incoming 1st and 2nd year undergraduate students in advance of the start of 2017/18 so that they know what the algorithm will be when they graduate. Text for student handbooks have been prepared for this purpose.
5.1 Implications for students on part-time courses
Part-time students who have already accrued credits which contribute to their final degree outcome under the current system will not be impacted by the changes in 2018/19. For part-time students who, by 2018/19, have not yet taken modules which contribute to their final award, then their award classification will be calculated using the new algorithm.

4.2 Implications for students who are repeating modules and students on placement
The same principle holds for repeating students: if students have already been graded on modules that will count towards their final award classification, then their award will be calculated using the current algorithm. The changes will not apply to students on work placements in 2017/18 entering their final year in 2018/19 but will apply to second year students on work placements in 2018/19.

8. Further information
For further information regarding the planned changes, please discuss with your School Standards and Quality Manager, or Susannah Lamb in CADQ (susannah.lamb@ntu.ac.uk).