Faculty of Arts and Science Policy on Grading
October 11, 2011

Background

This policy is based on a final report of the Faculty of Arts and Science Subcommittee on Grading and their recommendations to the Faculty.[1] In May 2011, Queen's Senate adopted the use of letter grades and their grade point equivalents on a 4.3 scale. Although PeopleSoft supports the submission of final course marks *either* as letter grades *or* as numerical percentages on a 100-point scale, marks submitted as numbers are automatically converted to letters and grade point equivalents according to the Queen's Official Grade Conversion Scale (below). This scale was approved by Senate for the purpose of translating historical (pre-2011) percentage marks to Grade Point Averages (GPA). Going forward, it remains the official conversion used by PeopleSoft when instructors submit numerical marks rather than letter grades. No matter how marks are submitted, *only* the final letter grade is used in calculating GPA and in determining the student's academic status.

Queen's Official Grade Conversion Scale

Grade	Numerical Range (Historical)	Grade Point Equivalent
A+	90-100	4.3
A	85-89	4.0
A-	80-84	3.7
B+	77-79	3.3
B	73-76	3.0
B-	70-72	2.7
C+	67-69	2.3
C	63-66	2.0
C-	60-62	1.7
D+	57-59	1.3
D	53-56	1.0
D-	50-52	0.7
F	49 and below	0.0

The purpose of this policy is to seek a balance, respecting the diversity of departmental and disciplinary cultures, while working to ensure a reasonable degree of consistency in the assessment of student performance across all programs and departments. All departments and instructors in Arts and Science should follow the guidelines described below in order to ensure that the transition to the new regime of letter grades and GPA is accomplished with fairness, transparency, and accountability.

[1] Implementation of Letter-Grade Marking: Recommendations of the Faculty of Arts and Science Subcommittee on Grading, Version 4.3, September 13, 2011.

I. Options for communicating exam and assignment marks to students and for recording final marks.

Each academic department, program, or unit shall establish consistent grading policies based on one of the following three options:

- **Method 1.** ***"Letters In, Letters Out":*** Requiring that instructors determine and communicate both assignment grades and final grades only in the form of letters. The mechanism for calculating final grades from assignment grades is outlined below.

- **Method 2.** ***"Numbers In, Letters Out":*** Requiring that instructors communicate assignment grades as numerical percentages. Final course averages are calculated mathematically and then converted to letter grades following the Queen's Official Grade Conversion Scale (see above).

- **Method 3.** ***Instructor choice and/or mixed marking***: Allowing instructors a choice between methods 1 and 2, and in the case of mixed marking, allowing an instructor in a single course to give out letter grades for some assignments and numerical marks for others (e.g. papers vs. exams). Method 3 is the most flexible but also the most complex and potentially problematic. If this option is chosen, the procedures described below must be followed exactly, and safeguards should be established to guarantee that students understand exactly how marks are being calculated, and that outcomes are fair and consistent across all courses.

The chosen method shall be communicated to students on each Departmental website and on all course syllabi to ensure that students need to know the rules governing the derivation of their marks. The rules should, in the large majority of cases, be universal across the Faculty.

1. Method 1: *"Letters In, Letters Out"*

This option, working only in letter grades, is designed primarily for those departments that emphasize qualitative assignments such as essays and essay-type examinations. This method encourages instructors to unmoor themselves from the old numerical percentage system and to *think in letter grades*. **The procedures outlined below provide a step-by-step guide to letter grading, outlining the one Faculty-approved way to calculate final course grades from the weighted average of letter-grade assignment marks.**

Procedure:

All assignment marks are given as letters, in conformity with the grade descriptors established in the Academic Regulations. In order to calculate final course averages, assignment grades are temporarily converted into numbers according to the following scale:

Arts & Science Letter Grade Input Scheme

Assignment mark	Numerical value for calculation of final mark
A+	93
A	87
A-	82
B+	78
B	75
B-	72
C+	68
C	65
C-	62
D+	58
D	55
D-	52
F48 (F+)	48
F24 (F)	24
F0 (0)	0

If you use Moodle's grade book, you can easily set it to do the calculations automatically. Just select from the pull-down menu for each assignment **"Arts & Science Letter Grade Input Scheme."** Moodle does the rest, calculating final averages according to the values in the table, and then converting those numerical averages back to letter grades using the Queen's Official Grade Conversion Scale.

If you figure your final marks manually or using an excel spreadsheet, just input for each assignment the numerical value that matches the letter grade you communicated to the student. After calculating a final numerical course average, use the Queen's Official Grade Conversion Scale to find the correct final letter grade, or simply enter the nearest whole number in your PeopleSoft grade roster for automatic conversion.

Comments:

- The sole purpose of the Arts & Science Letter Grade Input Scheme is to derive fair and accurate letter-grade final marks from the letter-grade assignment marks ("letters in, letters out").
- The Arts & Science Letter Grade Input Scheme is proposed as the sole method for deriving letter grade final marks from letter-grade assignment marks. It has been tested and judged the best of the alternatives. By establishing a common method and a common scale, it ensures that all students in all classes are treated equally, and that students know exactly how their marks are being calculated. To do otherwise could expose the Faculty to the risk of frequent student appeals.
- These numerical values have, in most cases, a slight rounding up effect, so that two equally weighted assignments earning marks of A- and B+, for example, will result in a

final mark of A-. At the same time, three equally weighted assignments of A-, B+, and B will naturally average to a B+.

- The value of 93 for A+ is high enough that two equally weighted assignment grades of A and A+ will result in an A+ final grade, but not so high that a single A+ will radically distort a course average, as could happen if a higher value were used. *In technical terms, the Arts & Science Letter Grade Input Scheme corrects for the nonlinearity of a numerical scale where the A+ range covers 11% (90-100), the A range 5% (85-89), and the B+ range only 3% (77-79)*.
- There are 3 different F values:
    - a high F calculated at 48%, high enough that a D- in another equally weighted assignment will pull the final average up to passing.
    - a standard F calculated at 24% that will be more difficult—though not impossible—to overcome by performing well on other assignments.
    - a low F calculated at 0% for assignments not submitted, penalties in cases of departure from academic integrity, or any other circumstance where a 0 would have been assessed under the old numerical marking system.

  Having the choice of three "F" grades allows instructors to distinguish between different kinds of failures, and prevents the scenario (characteristic of some scales) where an F on one assignment virtually guarantees a course fail.

1. Method 2. *"Numbers In, Letters Out"*

The option of assigning and communicating numerical marks for all assignments, saving the letter grade conversion until the end, is best suited to departments that emphasize assignments where the mark is determined by the number of correct answers. The "numbers in, letters out" option also preserves instructors' ability to use the entire 100-point scale to make fine distinctions of quality between individual assignments, although that precision is ultimately lost in the final conversion to a letter grade.

Procedure:

All assignment marks are communicated to students as numerical grades, and those numbers are used to calculate final course averages. Translation of final averages into letter grades, using the Queen's Official Grade Conversion Scale, happens at the end of the course.

If you calculate averages manually or with an excel spreadsheet, this method is, in strictly technical terms, identical to past practice up until the final conversion to a letter grade using the Queen's Official Grade Conversion Scale. Remember, however, that once PeopleSoft makes that conversion from numerical averages to letter grades, the precision of the 100-point scale disappears, and only the final letter grade is counted.

If you use the Moodle grade book and keep the default setting for each assignment (the 100-point numerical scale), final averages are calculated correctly. The Arts & Science Letter Grade Input Scheme is not used in this method. Unfortunately, with existing defaults students do not *see* the numerical assignment mark that is being applied

toward their course average; they only see the corresponding letter grade. There are two ways to fix this, one low-tech and the other high-tech.

Low-tech: simply make sure for each assignment that in the comments you tell students the actual numerical mark they received.

High-tech: in Moodle, go to "Grades" from the list on the left-hand side. When you see the grade book, click on the "settings" tab at the top. That takes you to the Course Settings page. Change the "Grade Display Type" from "Default (Letter)" to "Letter (real)," and click the "save changes" button at the bottom. Now your students will see both the letter grade and the numerical percentage for each assignment.

Comments:

Although the "numbers in, letters out" method looks and feels very much like traditional practice, it is essential that instructors and departments keep several important points in mind:

- Only the letter grade, after the final conversion at the end of the course, is used in calculating GPA and in determining the student's academic status. Percentage averages no longer form any real part of the official marks scheme. So if an instructor submits a final grade of 80% for one student and 84% for another, both receive a course grade of A- and both students' respective GPAs are calculated using the identical earned grade point of 3.7.
    - In other words, unlike under the old marking system, submitted *final* marks of 80% and 84% are indistinguishable (both are A-/3.7), while final marks of 84% and 85% are very different (A-/3.7 vs. A/4.0).
    - *On individual assignments*, however, the difference between a mark of 80 and 84 may be significant, because an 84 averaged with an 86 on a subsequent assignment results in an 85 (A), while an 80 averaged with that same 86 results in an 83 (A-). This is one reason why some departments may choose this method, in order to preserve finer distinctions among assignment marks.
    - This option may also be attractive for those classes in which a prize is awarded to the student with the highest average, or where for some other reason class rankings need to be kept. Although multiple students are likely to share the identical highest letter grade in the course, this method makes it possible to consult original raw scores in order to determine the highest course mark. **Keep in mind, however, that PeopleSoft does not retain the inputted numerical marks after it instantly converts them to letters.** In order to be able to consult the raw numerical percentages, instructors must remember to keep their original spreadsheets, or if using Moodle, to *export their grade book* to their own computers and save the file (default is .csv format).

- Instructors using method 2 should, like those using method 1, strive for course averages that conform to the Grade Descriptors as established in the Academic Regulations. In other words, final averages in the 90s should be Truly Exceptional, 85-89 Outstanding, 80-84 Excellent, 77-79 Very Good, etc. This diverges from how some departments have

traditionally marked, both within the A range and particularly in the 65-69 range, which used to translate as a B- but now translates as a C+ or C.

- Because in method 2 the numerical mark is the value used in calculating the course average, students should *always* be told what that numerical mark is. They should also be told the letter range in which each assignment mark falls.

2. Method 3. Instructor Choice and/or Mixed Marking

Departments that permit instructors to choose either Method 1 ("Letters In") or Method 2 ("Numbers In") must take extra care to ensure that every course syllabus communicates to students the method employed. Those departments are encouraged to keep detailed statistics on marking to ensure that no discrepancies emerge between instructors using different methods. This option may be attractive, however, to departments that have great diversity in their courses, with some essay-based and others assessed primarily on tests with right-or-wrong answers, or where some instructors prefer to think only in letters but others wish to retain fine distinctions between one paper or exam and another. Method 3 will also appeal to departments whose instructors wish to do mixed marking (i.e. using method 1 on some assignments and method 2 on other assignments within a single course: see below).

Procedure:

Instructors who choose either Method 1 or Method 2 for the whole course: follow the respective instructions for each method.

For mixed marking: If you calculate manually or use an excel spreadsheet, use Method 2 ("numbers in"). When giving a percentage grade on an assignment *(typically on exams)*, use the entire 100-point scale. When giving a letter grade *(typically on essays)*, use only those percentage marks that correspond to letter grades in the **Arts & Science Letter Grade Input Scheme** (i.e. 93 for A+, 87 for A, 82 for A-, 78 for B+, 75 for B, etc.). Communicate all assignment marks as both letters and numbers, so that students know the value being applied toward their course average.

If you use the Moodle gradebook, select the **Arts and Science Letter Grade Input Scheme** for those assignments you are giving letters, and keep the default 100-point scale for those assignments you are giving numbers. Remember that students normally won't *see* numerical grades in Moodle, so either give them those numbers in comments, or change the Grade Display Type in the Moodle Course Settings (see method 2 above).

Comments on mixed marking in a single course:

- Course syllabi must disclose which assignments will be given letter grades, which will be given numerical percentages, and the scales used to translate assignment grades to numbers and final averages back to letters. It is important to avoid "black boxes" where students can't see how their final mark is calculated.
- Do not use mixed marking unless you are confident that you understand Method 1 and Method 2 well enough to explain them fully to students.

3. Use of a Method other than those defined above

Approval from an Associate Dean (Studies) will be required for a department to adopt a marking policy that deviates from Method 1, 2 or 3 defined above. Where a department does apply to the Faculty for permission to use numerical marks in a nonstandard way, such as scaling raw scores by percentile prior to conversion to letters rather than adhering to the Queen's Official Grade Conversion Scale, transparency and communication are key to avoiding potential problems.

The application process for approval for a specialized method must address the following information:

- The request should explain the specialized procedures and/or scales to be used, and clearly present the rationale and anticipated outcomes.
- All specialized procedures and scales must be communicated to students on the departmental website and on all course syllabi, and the reason for the departure from the Faculty norm explained.
- Specialized procedures must be relatively easy to understand and implement.
- Specialized procedures must lead to outcomes that bring the distribution of course grades in the department using them into greater, not lesser, conformity with Faculty-wide averages and patterns. Corroborating statistics over time may be required.

II Collection of Departmental Mark Data

The Faculty and Departments shall annually compile, maintain, and disseminate statistical breakdowns of all marks awarded (sufficiently aggregated to guarantee student anonymity).