

Report No. 3686

#### **MEMORANDUM**

**To:** Executive Committee of Faculty Council (March 11, 2021)

Faculty Council (April 6, 2021)

From: Professor Daniel Posen

Chair, Standing Committee on Examinations

**Date:** February 26, 2021

Re: Interpretation of Grades

#### REPORT CLASSIFICATION

This is a routine or minor policy matter that will be considered by the Executive Committee for approving and forwarding to Faculty Council for information.

#### **BACKGROUND**

The Faculty of Applied Science and Engineering (FASE) does not currently have a statement describing how to interpret grades assigned within the Faculty. The *Governing Council University Assessment and Grading Practices Policy*<sup>1</sup> provides a conversion between percent grades and letter grades but does not provide an interpretation for these letter grades. The Governing Council policy allows Divisions to develop procedures for implementing appropriate grading practices, provided they are consistent with the policy. Other divisions, such as Arts & Science, do publish statements on what grades mean<sup>2</sup> and on appropriate grade distributions<sup>3</sup>.

#### **STRUCTURE**

To ensure common standards and procedures across courses, the Committee on Examinations has developed a document (*Final Course Marks – Interpretation of Grades*) to provide descriptors of grade categories, as well as typical grade distributions within a course based on recent historical data within the Faculty. That document is attached to this report and is effective April 7, 2021.

<sup>&</sup>lt;sup>1</sup> http://www.governingcouncil.utoronto.ca/policies/uniassgpp.htm

<sup>&</sup>lt;sup>2</sup> https://advice.writing.utoronto.ca/general/grading-policy/

<sup>&</sup>lt;sup>3</sup> https://www.artsci.utoronto.ca/faculty-staff/teaching/academic-handbook#FinalMarks

The grade descriptors are new for the Faculty. The proposed typical grade distributions are from historical averages and are not intended to represent a change from current practice.

As important context, we note the following sections from the *Governing Council University*Assessment and Grading Practices Policy:

### **Distribution of Policy**

A copy of the University Assessment and Grading Practices Policy as well as the description of the grade scales and any divisional regulations and guidelines must be published in full in the Academic Calendar of each division and made available to students and to all instructors and others, including teaching assistants, involved in the evaluation of student performance, either electronically or, upon request, in hard copy.

[...]

### 3.4.2. Distribution of grades

The distribution of grades in any course, examination or other academic assessment must not be predetermined by any system of quotas that specifies the number or percentage of grades allowable at any grade level. However, a division/faculty may provide guidelines to instructors setting out a reasonable distribution of grades in the division or department. The division may request an explanation of any grades for a course that appear not to meet divisional guidelines, are not based on the approved grade scales, or otherwise appear anomalous in reference to the Policy. It is understood that this section will normally only be used when the class size is thirty students or greater.

#### PROCESS AND CONSULTATION

The attached *Final Course Marks – Interpretation of Grades* has been developed over several years, drawing on guidelines from other Divisions, archives developed by previous sittings of the Committee on Examinations, and discussion among current Committee members. The document was discussed with other faculty and staff members, including the Chair of the Undergraduate Curriculum Committee, the Chair of the Student Awards Committee, and several ISTEP faculty members. The *Final Course Marks – Interpretation of Grades* was also brought forward for discussion at the February 24, 2021 Faculty Council meeting.

#### RECOMMENDATION FOR FACULTY COUNCIL

For information.



# **FINAL COURSE MARKS – Interpretation of grades**

### **Preamble**

This document is provided by the Committee on Examination to all undergraduate instructors in the FASE of the UofT. It is provided for information only purposes. The Committee on Examinations reviews all final course grades recommended by instructors at the end of each term to maintain uniform and consistently applied standards of student evaluation. In doing so, the Committee reviews these recommended course grades for consistency with the Faculty norms in each academic year and historical values (average and spread). The Committee on Examinations ultimately has the final responsibility for assigning the official course grades. The full text of the University Assessment and Grading Practices Policy is available at the following link:

www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/grading.pdf

# **Official Grading Policy**

Instructors are responsible for the grading of the final exam and are expected to exercise their best judgment in assessing answers to examination questions and in determining final course marks. Any assessment of the performance of students is not to be based on any system of quotas or predetermined arbitrary limits.

The full text of the Faculty's Grading Policies is available at the following link: https://engineering.calendar.utoronto.ca/academic-regulations#eleven

# **Relationship to CEAB Accreditation**

The measurement of Graduate Attributes for accreditation also relies on measuring the distribution of students in the four categories of Exceeds Expectations, Meets Expectation, Below Expectations and Fails. For accreditation, the measurement is for specific program learning outcomes. There is no requirement for the definition of "Expectations" used for accreditation to match the definitions presented in this document.

# **Interpretation of Applied Science & Engineering Grades at University of Toronto**

### Exceeds expectations (Excellent): 80-100%

90% - 100% (A+): Grades in this range represent student work that has clearly and substantially surpassed course expectations, demonstrating superior grasp of the subject matter and consistent ability at extension. <sup>1</sup>

80% - 89% (A/A-): Grades in this range represent student work that has surpassed course expectations, demonstrating superior grasp of subject matter and ability at extension.<sup>1</sup>

### Meets expectations (Good/Adequate): 60-79%

70% - 79% (B, Good): Grades in this range represent student work that has solidly met course expectations, that shows general success at solving complex problems and demonstrates some ability at extension.<sup>1</sup>

60% - 69% (C, Adequate): Grades in this range represent student work that shows some success at solving complex problems and has generally met course expectations, especially with core material and simple problems.

# Below expectations (Marginal): 50% - 59% (D)

50% - 59%: Grades in this range represent student work that demonstrates mastery of the minimum essential ideas, concepts and processes, but does not demonstrate the ability to solve complex problems or critically interpret course material. The student work has met only the most basic course expectations.

#### Fails (Inadequate): 0% - 49% (F)

Grades below 50% represent work that is either incomplete or that does not meet minimum expectations for the course.

30-49%: Student has completed a substantial portion of the required work but has not demonstrated mastery of the minimum essential concepts.

0-30%: Typically indicates that not enough work was submitted or it was of such low quality as to defy analysis.

<sup>&</sup>lt;sup>1</sup> Examples of extension may include developing good quality and novel solutions to open-ended problems; critically evaluating problems solutions or proposed designs; applying concepts in unfamiliar settings; drawing connections between concepts; using solutions to provide insightful recommendations.

# **Typical Grade Frequency by Course:**

Note that these proportions should be measured across courses and across years, and not necessarily within a given course. The ranges provided here are based on historical values, and are not intended to represent a shift in current grading practices. Further, these are provided as guidelines only; any assessment of the performance of students is not to be based on any system of quotas or predetermined arbitrary limits.

### **Exceeds Expectations**

For large first or second year courses, the proportion of grades exceeding 80% is typically expected to be around 30-40% of the students. The proportion of grades exceeding 90% would typically be expected to be around 5-15% of the students. As students mature and are allowed to select courses that match their interests in upper years, it would not be unusual for courses to award grades in excess of 80% to 40-60% of enrolled students, with 10-20% of students receiving grades in excess of 90%.

### **Meets Expectations**

For large first or second year courses, typically 15-25% of student grades in a given course fall between 60-70%, while 25-35% of grades would fall between 70-80%. For 300 and 400 level courses, B-range grades (70-79%) likewise typically comprise 25-35% of grades in a given course, with C-range grades (60-69%) representing 5-20% of grades. For 400 and 500-level courses, it is not unusual for >90% of students to achieve grades in excess of 70%.

### **Below Expectations and Fails**

For large first or second year courses, students receiving grades below 60% will typically rank in the bottom 5-15% of the class.

For large first or second year courses, typically no more than 5-10% of students are expected to receive a failing grade. In higher level courses, it is common to have no failures. Upper year courses where over 5-10% of students are failing regularly should be examined carefully.

# **Historic Grade distributions**

The tables below provide historic grade frequencies that were used in establishing the typical grade frequencies described in this document. This historical data also provides a more detailed representation of Faculty norms, which the Committee on Examinations considers when reviewing course grades.

Table 1: Historic grade frequency data from 2013-2018. Table shows the proportion of grades in each bin by course, as an average (across courses), and as a range encompassing 80% of all courses with 30 or more students (excluding capstone and thesis courses)

Course	Average	A (80-	B (70-79%)	C (60-69%)	D (50-59%)	F (<50%)
number	grade	100%)				
100	74%	38%	29%	19%	10%	4%
	(69-78%)	(23-53%)	(20-40%)	(10-27%)	(3-18%)	(0-8%)
200	75%	40%	32%	19%	7%	2%
	(71-80%)	(25-58%)	(23-44%)	(8-28%)	(1-14%)	(0-5%)
300	77%	47%	31%	16%	5%	1%
	(72-82%)	(30-66%)	(21-42%)	(4-26%)	(0-12%)	(0-3%)
400+	79%	55%	30%	11%	3%	1%
	(74-84%)	(33-79%)	(23-44%)	(0-23%)	(0-8%)	(0-3%)

Table 2: Historic grade frequency data from 2013-2018. Table shows the proportion of grades exceeding each threshold by course, as an average (across courses), and as a range encompassing 80% of all courses with 30 or more students (excluding capstone and thesis courses)

Course number	≥90%	≥80%	≥70%	≥60%	≥50%
100	11%	38%	67%	87%	96%
	(3-21%)	(23-53%)	(50-84%)	(75-96%)	(92-100%)
200	10%	40%	73%	91%	98%
	(2-19%)	(25-58%)	(57-90%)	(83-99%)	(95-100%)
300	12%	47%	78%	94%	99%
	(3-22%)	(30-66%)	(62-94%)	(86-100%)	(97-100%)
400+	13%	55%	86%	97%	99%
	(2-28%)	(33-79%)	(69-99%)	(90-100%)	(97-100%)