**The Hong Kong University of Science and Technology**

**Guidelines for Use of Undergraduate Course Grade Distribution Bands : April 2020**

The University has adopted the Outcomes-based Education (OBE) approach to course grading since 2008. In this approach, students are assigned grades based on rubrics that describe the levels of achievement of course intended learning outcomes. This is known as criterion-referencing. Previously, students were graded based on their relative ranking among other students in the same course (known as norm-referencing or "grading to a curve").

Criterion-referencing fosters a mutually cooperative learning environment and encourages students to collaborate in learning so that they strive for a higher level of achievement. In contrast, norm-referencing may create a ruthless competition environment among students, as only a fixed number or percentage of each grade is awarded.

Criterion-referencing, however, does not mean that a large number of A grades will be awarded. In fact, the expected levels of achievement or standards (or the criteria) set for earning the various grades need to **benchmark international standards** and, at the same time, assessments should be sufficiently challenging to **provide differentiation** of student performance at HKUST. These standards (or criteria) may evolve slowly over the years, reflecting the overall ability or competency of the students, so that a certain level of differentiation manifested in the grade distributions can still be maintained. However, this is very different from norm-referencing since these standards **are defined at the beginning of every course**. Hence, students are encouraged to achieve these high standards, instead of trying to beat their fellow classmates in performance.

To maintain a balance between evaluating student achievement of course learning outcomes while maintaining academic standards, the University has (i) agreed general descriptors (https://registry.hkust.edu.hk/resource-library/grade-descriptors-assessment-key-learning-outcomes), for the level of student achievement of key learning outcomes required for course grades A-D; and (ii) regularly provides information about the University's experience with the distribution of course grades.

It is recognized and appreciated that there are justifiable variations in grade distributions among Schools and between introductory courses (levels 1000 or 2000) and advanced courses (levels 3000 or 4000). **There is no intention to use a rigid rule to artificially force course grades to a preset distribution**, which would go against the spirit of academic freedom and criterion referencing.

The current grade monitoring mechanism practiced at HKUST is generally effective. Grades assigned by the course instructor need to be approved by the Head of the Department/Division offering that course at the end of each term. Overall course grade distribution statistics, by Schools and by level, will continue to be monitored annually by the Committee on Undergraduate Studies (CUS) and the Senate. Faculty members need to 1) set achievement standards (or criteria) and assessment rubrics for each course grade, and 2) assess students' performance against these standards and assign grades accordingly. To better facilitate this process, starting from Fall 2020, **course instructors and Heads of Department/Division will be provided with the grade distributions of the three previous offerings of the same course for reference, to detect any repeated or systematic deviations.**

While the grade distribution guideline bands below state the proportions of students at each grade level, they are not to be taken as strict targets to be met by every given course section

in every given term. For any given section offered in a particular term, there is no requirement to stick to any bands. Rather, the grade distribution guideline bands reflect the proportions of students who should be at each grade level, averaging across all courses in the year. Likewise, the proportions of grades awarded to students for a given course should tend to these guideline distribution bands across years. This means that deviations from the guideline bands are acceptable in any given course section in a particular term. However, **any such deviations should be discussed with Heads of Department/Division prior to grade approval**, and the Heads should be comfortable with the reasons for these deviations. Some deviations are predictably repeating, e.g., senior-year honors project-based courses will tend to have larger proportions of As. Other deviations might be attributable to an unusually good group of students in a specific term, in which case the course grades should naturally revert to the guideline band in the next offering. If deviation is caused by lenient grading of assessment, a re-marking may be needed. In all cases of deviations, instructors should clearly document the reason(s) for any such deviation.

The University is pleased to note that the overall grade distributions at University level, School level and levels of study 1000-4000 have been relatively stable and consistent over the past several years. However, they are slightly out of line with the 2020 guideline grade distribution bands that were based on historical grade distributions set prior to the adoption of outcome based education and criterion referenced assessment. The Senate (April 2020), on the recommendation of the CUS, therefore reviewed the grade distribution statistics and agreed that the grade distribution guideline bands should be revised, **to more accurately reflect actual grade distributions at HKUST.**

The revised guideline bands are shown below. It is important to note that this change is intended to align the guideline bands with recent grade distributions and should not be viewed as a change in grading practice. In fact, current grading practices should be maintained, to keep grades in line with the revised guideline bands. Faculty should not award more A grades and fewer C grades than currently, just because the guideline bands have changed. Rather, it is expected that, over time and across course sections, the proportion of each grade awarded will converge to the revised, historically-observed guideline distribution bands.

### *Grade Distribution Guideline Bands based on the University's experience*
### *[approved by the Senate in April 2020]*

| Grade | Grade Descriptor | Broad criteria achieved | Guideline |
|---|---|---|---|
| A | Excellent Performance | Comprehensive grasp of the subject | 10-25% |
| B | Good Performance | Good knowledge and understanding | 25-40% |
| C | Satisfactory Performance | Adequate knowledge and understanding | 25-40% |
| D | Marginal Pass | Threshold knowledge of core subject | 5-10% |
| F | Fail | | 0-5% |