Relative grading scheme

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I. Definition

1. **Population or Universe** - Relative grading (RG) specifies that the universe is the class under consideration. It should not be compared with any other institute or world at large to generalize i.e.it is a study of performances of the students belonging to a particular cohort

2. **Grades under Relative Grading:** RG draws strength from the process which implies to segregate student performances in to the following categories

Letter Grade awarded	Qualitative meaning	Grade point
A	Top performance /Exemplary performance	10
B	Good Performance/Above average performance	8
C	Fair performance/Satisfactory performance	6
D	Poor performance/Unsatisfactory performance	4
E	Exposed/Very weak performance	2

3. **Mechanism:** RG should not only be followed while awarding grades but also while evaluating the assignments/papers/any evaluation component
    For e.g. When the relative grading standard is followed in grading the assignment responses of a group of learners on a given question or task, the criterion is the performance of the whole group of learners on that task. This is in stark difference with absolute grading mechanism in which the marks are awarded based on the ideal performance on the given task, irrespective of anybody's actual performance.

4. **Transparency of process:** Continuous performance assessment of student is carried out with approximately 50%-70% throughout the course in the form of projects/assignments/seminars/Quiz/ Mid-term exam etc and balance 30%-50% in form of end-term evaluation called Comprehensive examination.
    Transparency is ensured in the evaluation process by giving students an opportunity to see the answer sheets.

II. Process for grading

1. Student performance in a particular course is first quantified as total marks in all evaluation components of that course.

2. Letter grades approved as per students handbook are - A, B, C, D and E

3. Student's grade is based on his or her relative position in the class.

4. Marks have no absolute correlation with grades. The relationship between the marks obtained and the grade awarded in a course is relative, based on the average performance of the batch in that course, the nature of course, level of delivery, quality of the evaluation components, difficulty level and the evaluation methodology

5. Spread of marks in a particular course depends upon the quality (difficulty) of the paper, nature of the test and evaluation process. Ideally one should have a good spread of marks.

    To be able to distinguish between students deserving different letter grades, a good distribution of marks obtained by the class is essential at the end of the semester/term. This is possible by employing the following

    i.   Broad spectrum of evaluation instruments (e.g. quiz, assignments, projects, tests, viva, seminar, etc.)

    ii. Question papers having questions that require distinctly different levels of scholastic ability

    iii. Use range of technology for ensuring variety of learning objectives (for e.g. Mastery of content, communication and collaboration, applying past information to new problem solving, learning and self aware thinking, critical thinking, leadership, creativity and innovation, etc) as attended through the above components

6. Calculate mean and standard deviation.

7. Study the class average with reference to the following parameters and decide which grade to put around "mean"

    a. Difficulty level of the evaluation components

    b. Nature of the course like Descriptive course, Analytical and application based course,

Research based course, Problem solving based course, etc

c. Type of assignments and weights (example - quiz as opposed to application based questions)

d. Students competency and performance during the course

e. Evaluation technique followed by the faculty [lenient grades (awarded marks for partial correct answers, etc]

Examples

e.g. 1. Suppose the course is of medium difficulty level and is a core course, and then if the mean comes around 50-60; draw a dome around mean; this can be considered grade "C".

e.g. 2. If the mean is on a higher side e.g. 65-75, then a faculty may want to award "B" around the mean. On the other hand, if mean is around 35-40, faculty can award "D" around mean

e.g. 3. If the difficulty level of the paper is very high, the faculty may want to award "B" around mean even with a lower mean number. Likewise, if the difficulty level of the paper is low, the faculty may want to award "D" around mean, even with a higher mean number.

8 Draw cut-off lines by making Judgment on how much population to be included say mean+-standard deviation or mean+-0.5*standard deviation. Cut off lines generally should be drawn in such a manner that each group is unambiguously distinct from its adjacent groups. There should be clear cut gaps near the cut off lines or there should be very thin population adjacent to the cut off lines.

9 If there are isolated one or two cases which are apart from others on either side of the histogram, i.e. 100 marks or towards zero marks, they should be considered as "Outliers". They should be excluded from the grading decision on other cases.

10 Look at the histogram, curve spread and height. If it appears to be skewed, take a call on the performances and whether any bias involved while awarding marks

11 Consider the "Borderline" cases. Cases near the cut off lines are called Border Line Cases. Look at the following parameters when making judgment about borderline cases before awarding grades

i. Continuous performance improvement made by the student in various components

conducted prior to comprehensive exam,

ii. Attendance level,

iii.Class participation,

iv. If possible relook in to comprehensive examination etc.

After studying borderline cases deeply and thoroughly decide on the candidate's grading, also make a note on how the borderline cases were dealt and this can be used as a reference if the student approaches for discussion at a later stage.

12 Do this exercise at the time of mid-term or when more than 50% evaluation is completed, so that there are no surprises to the student and he / she is aware of his relative performance.

13 Calculate the % of each grade - ideally "A" and "E" grades should be awarded to the most deserving candidates. This will send clear signal to the employers and build a strong credibility when a student is awarded with GRADE A. If the distribution is normal; Grade "A" and Grade "E" should not be ideally more than 7-10% of the population.

III. Methods

A. **Standard deviation**

When the population is large (30 and above), we can use statistical technique, standard deviation to draw grades. After the lines have been drawn by this mechanical process, we need to review the border line cases based on their continuous performance to thoughtfully arrive at the grades.

If there are natural dips around the mechanical calculated value, those should be used as a cut-off point.

Grades	Suggested range	Suggested % of students in each grade
A	Marks obtained>=Mean+(1.5*SD)	7%
B	Mean+(1.5*SD)>Marks obtained>=Mean+(0.5*SD)	24%

C	Mean+(0.5*SD)>Marks obtained>=Mean-(.5*SD)	38%
D	Mean-(.5*SD)>Marks obtained>=Mean-(1.5*SD)	24%
E	Marks obtained<Mean-(1.5*SD)	7%

This is a **suggestive** formula. Faculty is requested to exercise judgment based on student's performance and nature of the course (difficulty level, class room delivery, expectation, etc). If the histogram appears skewed, faculty should use this formula with caution. In this approach, invariably the border line cases will have to be dealt with as per suggested method above.

B. **Clustering approach with natural gaps**

This technique can be used if population is small or if there are clear-cut natural gaps observed in the marks awarded.

IV. Award of various Reports

The Student registers for a set of courses on the first day of the start of the semester/trimester/term. Technically, at the end of the semester/trimester/term, we have to close the account by entering one of the grades, which shows that the student has completed the course with the Grade mentioned against his name. Many a times due to various exigencies, the instructor may not be able to award any grade because of various reasons like the student has left the University or has withdrawn from the course / semester/trimester/term, etc. These factual reports should be mentioned against the name of such students. These Reports are not Grades but as an abuse of language, we may wrongly call them Grades. These reports are as under:

(a) I – Incomplete Report

If the Course-in-charge finds that a student has not fulfilled some of the requirements of a course before the final deadline for transmitting the grade, and he/she is satisfied that he/she is able to transmit some grade or a report with or without this particular fulfillment, but at his/her discretion wishes to give the student an opportunity, he/she may, within the deadline, send a Report I (Incomplete); and also inform the student of the same. It shall be the responsibility of the student to contact the Course-in-charge in time for replacement of the I Report within two weeks after the end of the semester (and within one week after the

end of summer term, for a summer term course), failing which, the Course-in-.charge will communicate whatever grade report is possible for the situation. In exceptional cases, the two week period may be extended by the Dean Academic Affairs, but it will not be extended beyond the next semester registration. No next semester registration is possible with I Report in any course.

(b) GA - Grade Awaited Report

Sometimes a situation may arise where a case of unfair means or indiscipline is pending or where a course is conducted by an outside Visiting Faculty where precise coordination between the University and the Visiting Faculty may not work in a timely manner. In these circumstances, the Dean Academic Affairs may authorize the Course-in-charge to Report GA (Grade Awaited) and replace this Report by a proper Grade at the earliest. Unlike I report, GA report will not affect further registration of the student.

(c) NC – Not Cleared

If a registered student in a course gives inadequate opportunity to the Course-in-Charge to evaluate him by absenting himself from quizzes, tests, and other components of evaluation, or by appearing in the same for the sake of appearance without applying himself to the task in hand or by submitting a blank answer script, then this event shall be reported as NC - Not Cleared. In case of courses like Thesis/ Seminar etc. where the evaluation is not through such formalized structures as quizzes, tests, etc., the periodic task given by the supervisor or the instructor would be the basis to determine whether a student is giving him/her a chance to arrive at a grade as provided in these regulations. The student so reported would have to register except the following, again in the same course at the earliest opportunity and obtain a valid grade.

    i.   If a student gets an NC report in a course taken by him as a Free Elective, then in this case he shall for ever forfeit further opportunity to take additional Free Electives.

    ii.   If a student gets an NC in Industry Practice/ Internship, then he/she will do the Thesis Course of the same duration and credits/ units.

(d) W - Withdrawn Report

If a student is permitted to withdraw from a course(s)/ Semester/trimester/term, then he/she would be reported as W (Withdrawn) in the course(s) or all the courses as the case may be. All the named courses and elective course from which the student has withdrawn

are required to be repeated by the student. In case the course happens to be a Free Elective, then the student is free not to repeat the same course.

(e) DP – Discontinued Programme

If after the registration, the student leaves the University or he/she expires then the student would be reported as DP – Discontinued Programme in those courses.

(f) RC – Registration Canceled

If the registration of the student for a course has to be canceled due to any reason like wrong registration, indiscipline, use of unfair means, etc. then the student would be reported as RC - Registration Canceled in that course.

V. Frequently Asked Questions

1. In a system of Relative Grading, if there is one student, who is exceptionally good, the grades of other students will be affected to their disadvantage. Is it true?

Ans: No. RG is based on relative performance of entire class and is centered around average. It is advised that outliers are excluded in determining the performance of other candidates.

2. Is it necessary that all grades must be awarded in a course?

Ans: No. Depending upon the spread of marks obtained in a particular course, course-in charge can make a decision of awarding appropriate grade.

3. Is the grading process to be consistent when applied for Mid-semester and when applied at the end of the semester?

Ans: Mid-term grading is done with an intention to allow student to have a fair idea about his/her positioning in the class and for him/her to take timely remedial measures. Normally, teachers should use mid-term grading as a tool to gauge the class performance and counsel the students to put in more effort for the end semester/term examination.

4. Can mean be used as a dividing line for deciding grades?

Ans: No. Mean indicates the class average. RG is centered around average marks. Hence, it is important to consider population around mean to draw the cut off lines. Course in-

charge can use Mean+-(1*SD) or Mean+-(.5*SD) to draw cut off lines based on the spread obtained in the course.

5. If two students with same marks fall on borderline and when they are scrutinized by considerations mentioned under II.11, they are awarded two different grades. Is this an acceptable proposition?

Ans: After generating the histogram and drawing of the cut off lines, the Course in-charge arrives at borderline cases. It is suggested that for each borderline case the performance is reassessed based on the learner's performance (Process-II.11) to decide on the grade.

6. In what way Relative Grading is better than Absolute Grading scheme?

Ans: RG allows for screening students according to their performance relative to their peers. Teacher's are empowered to award grades based on their engagement with students and his/her continuous performance appraisal through the teaching learning process. This is unlike the mechanical scheme of absolute grading.

7. What are the limitations of Relative Grading system?

Ans: By having learning objectives well defined, knowing learners better, detailing instructional procedures in the course handout, providing continuous assessment and ensuring that the teacher who teaches evaluates, relative grading makes teaching-learning effective and enjoyable. Additionally, it facilitates opportunities for a learner to correct his/her learning strategies and performance.