Guide for Department Conversations on Grading and Assessment

This document is intended to be a comprehensive guide for Department Chairs, Vice-Chairs, or key faculty members desiring to lead an in-depth discussion of grading and/or assessment in their department. The leadership of DTEI (Michael Dennin, Physics and Astronomy, mdennin@uci.edu, and Brian Sato, Molecular Biology and Bio Chem, bsato@uci.edu) and their staff are available to help facilitate any such conversations. Also, faculty Anita Casavantes-Bradford (Chicano Latino Studies and History, acasavan@uci.edu) and Pavan Kadandale (Molecular Biology and Bio Chem, pavah.k@uci.edu) have prepared a powerful presentation on the reasons we need to evaluate grading practices that can be shared with departments.

Context: Grading and assessment are core structures within the university system that have been developed with both explicit and implicit goals. A discussion of grades and assessment is best handled together due to their deep connection. Any discussion of grades and assessment should start with acknowledging the following aspects.

Grading and assessment are fundamentally concerned with identifying student learning for two main purposes:

1) Inform students of their progress - generally referred to as formative assessment
2) Communicate to external stakeholders regarding student performance - generally referred to as summative assessment

There are three main external stakeholders:

1) Potential employers
2) Graduate schools
3) Professional schools: primarily medical/health and law

One might group graduate and professional schools together as their use of grades is fundamentally controlled by the same group of people (faculty) that control the use of grades at the undergraduate level (or at least they share many of the same grading practices and values as faculty teaching undergrads).

In practice, grades are often used to rank students (even if ranking is not necessarily relevant) and identify students who are viewed as qualified to continue. Too often, these functions of grades are also used as a means of enrollment management in cases where alternative enrollment management practices could be utilized. Research
regularly confirms that these practices are inherently not equitable and generally are not aligned with our community values.

A few resources/concepts that might be useful for faculty to review before a discussion of grades/assessment are the following:

1) General review of the history of grading provides the context that grading schemes are not “fixed truths of higher education" but a constantly evolving system designed to meet specific needs. In this light, we should consider whether current practices fit our current needs. As one considers the impact of grading/assessment philosophies and approaches on diversity, equity and inclusion, understanding the fluidity of grading practices is important. A good starting point for a review is the following article: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4041495/

2) When considering grading/assessment practices in lower division courses, a core question is whether or not the goal is filtering out unqualified students or preparing students to be successful in upper division courses. This can be a challenge when lower division courses are taught as large lecture courses. Rather than assume that our students enter UCI having maximized their potential, research increasingly indicates that adopting a growth mindset instead of a fixed mindset can have a huge impact right from the beginning of a student’s experience (Canning, Meunks, Green & Murphy. (2019). STEM Faculty Who Believe Ability is Fixed Have Larger Racial Achievement Gaps and Inspire Less Student Motivation in Their Classes. Science Advances. 5(2). Link). At the time of preparing this document, CEP is actively considering policies that would effectively make the first year P/NP. This is a growing trend and solves many of the challenges associated with grading and equity while preserving academic performance and learning when done well. Departments may want to have local discussions of this possibility.

3) In fall 2020, the Vice Provost for Teaching and Learning hosted a campus-wide town hall on the topic of grading. Over 40 faculty attended from across campus and participated in the discussion. To see the summary of a campus-wide discussion of the topic of grading, please see this document: https://docs.google.com/document/d/184LV1rJH5qvp-CEJr2sZ3aq3lkJcXVRBW4NihG6Vv8/edit?usp=sharing. A key message of the discussion is the recognition that we need to address the equity issues inherent in the current systems and that we can maintain quality at the same time.
4) Research on grading and assessment has identified considerable issues with current approaches in the context of equity and inclusion. While existing methods do provide a certain level of “academic standards”, these standards are often overly narrow, and in some cases, effectively artificial barriers that no longer serve their intended purpose while limiting the success of minoritized students. A careful consideration of grading and assessment is never about lowering standards. It is about intentionally developing appropriate standards for our current goals and expectations.

5) In cases where the document refers to “research” without specific references, we have provided a fairly detailed bibliography in Appendix E.
Questions for discussion:

This section contains questions that can be utilized to guide a departmental discussion of grading/assessment. These should be treated as recommendations, and even though not all questions will be relevant for every department, they may suggest useful directions for discussion. The Appendices provide a range of information that may be useful for the discussion, including Appendix D which addresses the context within the APM for having departmental/campus level guidelines and policies around grading and assessment.

Grading Policies:

- As a department, do we have a clear understanding of how our colleagues assign grades, particularly in the context of linked courses?
- As a department, do we clearly communicate to students, especially through individual faculty syllabi, grading policies and schemes that are common to our courses versus those unique to individual courses? This will provide students with a “big picture” understanding of course expectations and highlight potential connections between courses.
- What is the departmental view of norm based versus criterion based grading? (see Appendix A for help with definitions). Alternative phrasing: Are there courses where grading needs to be reflective of learning versus courses where grading is meant to provide ranking information?
- Are there particular courses that require a departmental approach to grading because of their importance in the curriculum? Eg. Courses that are foundational for future courses versus relatively stand-alone electives.
- What are strategies we can share to balance grading as a motivator to perform certain learning activities versus a measure of student learning? (Role of formative versus summative assessment)
- What are some practical strategies we can share to lower administrative overhead of grading/assessment policies in large courses while maintaining the integrity of the process? (see Appendix B for suggested strategies to discuss)

Assessment Approaches:

- As a department, do we have a clear understanding of how our colleagues assess student learning, particularly in the context of linked courses?
- Are there particular courses that require a departmental approach to assessment because of their importance in the curriculum? Eg. Courses that are foundational for future courses versus relatively stand-alone electives.
• How do we offer creative assessments that leverage the reality of team work and information access (internet) and scale for large classes? (see Appendix C for suggested assessment strategies to discuss)
• What are strategies we can share for creating a level of flexibility by which students demonstrate learning? (eg. decrease reliance on high stakes assessments, Appendix B covers this as well)
• How can we have scalable assessments, especially in large lower division courses, that prepare students for types of detailed assessment in upper division courses?
• How can we design assessments that minimize academic integrity risks, especially in the current digital world?
• What do our current forms of assessment signal to students about what is valued and how they should direct their learning?
Appendix A: Definitions of grading schemes

Norm-referenced grading and ranked based grading: Any grading scheme which assigns scores in order to reach a predetermined distribution of grades. This includes bell curves, but may be more general to any predetermined grading scheme in which each letter category has a fixed percentage/number of students.

Bell curve: A specific type of norm-referenced grading scheme which assigns grades based on a “normal distribution”, typically with a predetermined average grade determination.

Colloquially discussed “curve”: Both faculty and students often understand a “curve” as anything other than grading on a 90 - 100 is an A, 80 - 90 is a B, etc. For many students, a curve is only understood in the positive sense of “my grade will be higher than the numerical score suggests”.

Straight scale grading: When students achieve a particular numerically set cutoff they achieve a particular letter grade.

“High school straight scale”: A straight scale is often interpreted to be the common K-12 scale: 90+% = A, 80-90%= B etc.

“Shifted scale grading”: This is a subcategory of straight scale grading where the scale deviates from the “standard” 90 - 100, etc. scale.

“Minimum guarantee scale”: This is a straight scale where it is clearly stated that the numerical cutoffs for a particular grade may be lowered for specific cases, such as a poorly planned exam, but never raised. This is often done with explicitly stating it upfront.

“Cut-off based grading”: This is where a particular grading criteria is not explicitly stated upfront and grades are determined based after the fact, often based on a combination of statistical concepts and “natural” cutoffs in the grade distribution.

Rubric based grading: Especially relevant to courses in which there is a heavy reliance on writing assignments, a rubric is used to determine letter/numerical grades for assignments.

Norming: This is a practice of getting people together to agree on a standard that is required for grading, usually based on a clear rubric. A key element of ensuring
consistent grading is across multiple sections taught by different TAs. Very common in writing program courses.

Appendix B: Administrative/Flexibility Strategies

A number of administrative policies that have been tried with success by faculty:

1) Late policies: navigating what qualifies for acceptable excuses for late work can take significant faculty time and add stress to students. Depending on the size of the class and nature of the work, faculty have used. The key element in these are student control over when it is “worth it” to be late, faculty do not have to evaluate any “excuses”, and minimal administrative overhead for faculty depending on how they design their course.
   a) “Late passes” - students are allowed to be late on a certain fraction of assignments.
   b) “Responsibility points” - each assignment carries N responsibility points (typically 5) and each day late reduces the number of responsibility points a student earns with that assignment. These points are a separate category for the grade - usually weighted extremely low and not requiring 100%
   c) “Something” has to be turned in at the due date - but students can submit revised/completed assignments at a later date. Either a fixed number or all assignments.

2) Alternate pathways to grade: For courses with sufficient assessments, students can have multiple pathways to determining their final grade. There are two basic modes:
   a) Student selects assignments used for summative assessment from a predetermined set of options
   b) Student grade is calculated two (or more) different ways, for example using “exams during the quarter only” or “exams during quarter and final”, or “final exam only”, and receive the highest grade.

Appendix C: Assessment strategies

1) Exams that involve a team component (or open book component) and an individual component. This is a growing method of assessment. See work by Eric Mazur of Harvard for more information. Also, Brian Sato (bsato@uci.edu) and Pavan Kadandale (pavan.k@uci.edu) are two faculty at UCI that have explored this approach.
2) Use standards-based grading, or specifications-grading which are both based on student competencies - for example, Renée Link (Chemistry, rlink@uci.edu) and Steve Mang (Chemistry, smang@uci.edu) used specifications grading in multiple classes: see references below.

3) Portfolio Assessment. Particularly useful in writing and other types of courses which are not exclusively test based. ePortfolios (accessible through Canvas profiles) can be comprehensive or selective, and they can extend beyond a particular class into a series of classes, or into a student's personal portfolio. They can include a student's research material and notes, low-stakes exercises, group work and discussion, evidence of reading and other assignment completion, larger project drafts, feedback, and revisions, multimodal work, reflective introduction. Advantages are twofold. Instructors have flexibility when it comes to feedback and assessment, without having to gauge each point at the micro level. Students can take risks at the initial stages, without worrying that they will lose points before the bigger pictures emerge.

Appendix D: Impact of Academic Freedom

Academic Freedom is often quoted as a reason that departments and/or the campus can not set any general policies for grading or assessment within courses. However, it is important to remember that academic freedom exists in the context of “professional standards” , as is clearly articulated in APM-010.

Excerpt from APM - 010 (italic emphasis added): "Academic freedom requires that teaching and scholarship be assessed by reference to the professional standards that sustain the University's pursuit and achievement of knowledge. The substance and nature of these standards properly lie within the expertise and authority of the faculty as a body. The competence of the faculty to apply these standards of assessment is recognized in the Standing Orders of The Regents, which establish a system of shared governance between the Administration and the Academic Senate. Academic freedom requires that the Academic Senate be given primary responsibility for applying academic standards, subject to appropriate review by the Administration, and that the Academic Senate exercise its responsibility in full compliance with applicable standards of professional care."

As a coherent curriculum and educational experience for students can depend on clear and consistent expectations of grades and assessment, it is important for student success that we have the honest (and sometimes difficult) conversations on how to improve our assessment of students. Ultimately, even in cases where the department determines the general standards that must be met in a given course and how those standards will be met, we also need to remember that it is the instructor of records responsibility and right to determine whether or not students have met those standards.
Appendix E: References

Here are a few references to get started with by category:

**Standards/Specifications Based Grading**


Marzano, R. J. *Formative Assessment & Standards-Based Grading* (Solution Tree Press, 2011).


[https://doi.org/10.1021/acs.jchemed.0c00859](https://doi.org/10.1021/acs.jchemed.0c00859)


**Alternative assessment approaches**


Academic Integrity approaches


COMPREHENSIVE REFERENCE LIST:


Heath, S.B. and McLaughlin, M.W. Identity and Inner-City Youth: Beyond Ethnicity and Gender (New York: Teacher’s College Press, 1993)


Practice 10 (1), 35-36.


Lister, R., & Leaney, J. (n.d.). First Year Programming: Let All the Flowers Bloom. 10.


