

In an ideal universe, all assignments will be set up so that the points and grades students earn align perfectly with well-formed definitions of letter grades. At Georgia Tech, for example, grades are interpreted as follows:

- A: Excellent (4 quality points per credit hour)
- B: Good (3 quality points per credit hour)
- C: Satisfactory (2 quality points per credit hour)
- D: Passing (1 quality points per credit hour)
- F: Failure (0 quality points per credit hour)

Ultimately, you should aim for alignment between student grades along the way, and final grades assigned at the end of the semester.

In general, most faculty do not grade on a curve in the traditional sense – where there is a pre-established percentage of students who will earn each grade level, and the distribution of student grades is set along that curve at the end of the semester (or after an assignment).

### Reasons to Avoid the Curve

- Curving grades can introduce misalignment between your learning objectives and assessments.
- Curving grades can lead to lack of clarity for students about how their work throughout the semester will impact their final grade. This can impact student learning in multiple ways, including the introduction of unnecessary anxiety, and/or the lowering of student motivation for engaging in course learning activities.
- Relying on a curve to assign grades can lead to situations where the reaction students have to their raw grades – most pronounced when the grades are quite high or quite low – will be misaligned with the intended feedback for the assignment. Feedback through grade assignment is one way to help students calibrate their need to increase or decrease their level of effort along the way.
- Using a curve to set grades introduces a form of competition between students that can be unhealthy, and it does not recognize the differences that can be at work in different classes from semester to semester. A very strong student can mess things up for everyone else in the class; a particularly strong class will not overall be rewarded for their strength; and so on.

If your students' average on a particular assignment (or in the class overall) is either very high or very low, that can be a sign you have not managed to set your expectations at an appropriate level, given the class and students you are teaching.<sup>1</sup>

<sup>1</sup> Note that the smaller the class, the less this statement applies.

### Strategies for Handling Low or Poorly Distributed Grades

1. Take the highest grade in the course and add enough points to it to make it a perfect score. Add the same number of points to each student's score and use the new scores as their adjusted grades.
2. Solve for X in the following equation, and use X as the new denominator for scores on the relevant assessment:

$$\frac{\text{Class average in points}}{X} = \frac{\text{Desired average in \%}}{100}$$

Note that it's common to use 80% as your target average, but you should consider your own preferences, your students' general expectations, and the norms that have been established by your departmental colleagues.

3. Look at the distribution of all of your students' grades. Identify natural clusters and breaking points, and use these points to identify revised grade cutoffs.
4. Allow students to re-submit their test or assignment with errors corrected – alongside an explanation for their new answer vs. old (i.e., where did they go wrong?). Allow for accumulation of up to half the lost points through this method.
5. Consider dropping particularly poor questions from the calculation (while ensuring that no individual student's grade goes *down* as a result of this move).
6. Offer extra credit opportunities to make up for the low average on a test or assignment.

### Questions to Guide your Approach

- How will I communicate my grade adjustment procedure to students?
- What additional workload will this adjustment provide for students? Is it reasonable and fair?
- What additional workload will this adjustment require of *me*? Do I have the time and energy to engage in this extra work?
- Will this method provide an unfair advantage or disadvantage to certain students? Can I compensate for this in some way?
- What additional problems might this action introduce? How is it likely to affect student motivation in this course? How well does it align with general attitudes and expectations among colleagues in my department?
- To what extent is the low average a result of something I have done, versus a problem with my students? What specific things can we collectively do to avoid this situation in the future?