

Synergy Gradebook

Questions have been asked recently a teacher's ability to change grades that are entered into the gradebook for students in grades 9 - 11.

Gradebook Score Process

- A teacher creates an assignment, telling Synergy which targets/standards are being covered in the assignment.
- Once the student completes the assignment, the teacher scores the targets using the scoring scale that goes from one to four with options to score half points (1.5, 2.5, 3.5). These scores are based on how the student demonstrates their knowledge and understanding of the target on that assignment. In most cases, targets are assigned to multiple assignments so that the teacher can measure learning over time and in different ways.
- Each of the target scores connected to an assignment is rolled up into an overall target score for the class in the following way using the same half point scale. Given the half point scale being used, calculated scores are rounded to the closest score on the scale.
 1. If there is only one assignment score attached to an overall target, the score for the assignment target is also the overall target score.
 2. If there are two assignment scores attached to an overall target, the score for the last assignment target is used for the overall target score. Grading is set up this way because we learn in steps and the measure for what learning has been absorbed by the student is typically in the latest work.
 3. If there are three or more assignment scores attached to an overall target, Synergy gradebook uses what is called a trend score formula. Trend scoring puts the scores through a formula that adds weight to the latest scores. Trend scoring is used for the same reason as above. The goal is to measure learning. We demonstrate deeper knowledge with practice, work, and time. Placing heavier weight on recent scores through the trend score formula is a more accurate measure of what has been learned from start to finish.

Rubric 1-4	
Score	Description
4	4
3.5	3.5
3	3
2.5	2.5
2	2
1.5	1.5
1	1

Synergy Trending (Power Law) Formula

A trending or power law formula is quite complex, but as mentioned above, it is the right formula to use when figuring out a grade for learning over time. For those that have an interest, the formula is below. In this algorithm, "X" is the ordinal number of the score, "S" is the score, and "N" is the number of scores with all scores in date order.

$$e \left[\left(\sum \ln x \right) \frac{\sum (\ln x)(\ln s) - \frac{(\sum \ln x)(\sum \ln s)}{N}}{\sum (\ln x)^2 - \frac{(\sum \ln x)^2}{N}} \right] + \left[\frac{\sum (\ln y) - (\sum \ln x) \frac{\sum (\ln x)(\ln s) - \frac{(\sum \ln x)(\sum \ln s)}{N}}{\sum (\ln x)^2 - \frac{(\sum \ln x)^2}{N}}}{N} \right]$$

- The overall target scores, no matter the content area, strand, or measurement topic, are averaged together to get the overall course score. The course score that is posted on the report card goes out to the hundredths place (2 decimal places).

What is new?

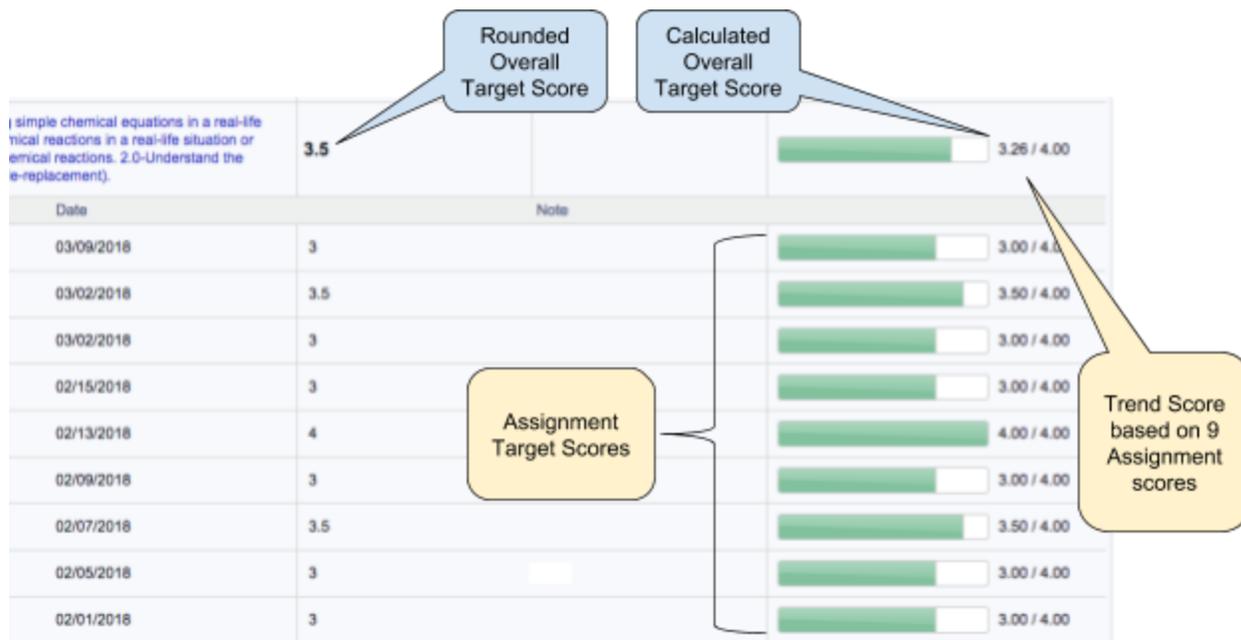
- 5% is added to the overall scores for accelerated courses and 10% is added to the overall scores for AP courses. While adding weight is new this year, the MHS guidance department will be updating AP and Accelerated course scores from previous years.
- Beginning in semester 2, course scores will go out two decimal places.
- With one exception**, teachers have the ability to override/change scores at each level of scoring.

What control does a teacher have to change a score?

- A teacher can enter and change an assignment target score.
- A teacher can override/change an overall target score with one exception.**
- A teacher can override/change a measurement topic score with one exception.**
- A teacher can override/change a strand score with one exception.**
- A teacher can override/change a course score before it is posted to the report card. This adjustment can be made out to the hundredths place.

****What limits are on a teacher's ability to change a score?**

The only limit to a teacher's ability to change a score is when a score is rounded to the grading scale. If a calculated score (target, topic, or strand) falls within the rounding range, the score cannot be changed. As an example, if a student has an overall score that calculates to a 3.26, it will show in the gradebook as a 3.50 because 3.26 rounds to 3.50 on the scale. If a teacher wants to change the overall score to a 4.00, that can be done because it is on the scale and is outside of the rounding formula. Synergy will not allow the teacher to change the calculated score to a 3.50, giving the student an additional .24 points in the average, because the system is already rounding the score to a 3.50.



We have made Synergy aware that we want to be able to override these scores also. We are waiting for confirmation that this is a change that will be made. If the change order is accepted, it will most likely not be done until next school year.