

How do I manage outcome mastery calculations in a course?

If enabled by your institution, you can manage outcome mastery calculations for all outcomes in your course. Changes made to a mastery calculation will apply to all rubrics with outcomes in your course that have not already been used for student assessment. Changes to mastery calculations only apply to the course from where they are managed.

If course-wide mastery calculations have not been enabled in your course, mastery scale calculations [must be managed independently](#) in each outcome. To request course-level outcome calculations in your course, contact your Canvas administrator.

Open Outcomes

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In Course Navigation, click the **Outcomes** link.

Open Calculation Methods

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Click the **Calculation** tab.

Note: If the Calculation tab does not display in the Outcomes page, course-level outcome mastery calculations have not been enabled by your institution.

Select Calculation Method

[Select Calculation Method](#)

To select a mastery calculation method, click the **Mastery Calculation** drop-down menu [1]. You can select one of four calculation methods: Weighted Average [2], Decaying Average [3], n Number of Times [4], Most Recent Score [5], Highest Score [6], and Average [7].

Read Only View

If you are unable to edit the mastery calculation, you do not have permission to edit the mastery calculation in your course. For assistance managing your mastery calculation, contact your Canvas administrator.

Select Weighted Average

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To average assessment item scores with a greater weight for the most recent assessment item, select the **Weighted Average** option [1].

The Weighted Average calculation splits the total percentage between the most recent assessment item and an average of all prior assessment items. For example, you can set the most recent submission to be weighted at 40% of the total and prior items to be weighted at 60% of the total.

Enter the percentage to use for the most recent result in the **Parameter** field [2]. You can also increase or decrease the parameter by using the **Arrow** icons [3]. The Parameter field accepts whole numbers between 1 and 99. By default, the parameter is set to 65%. The remaining amount is used to weigh prior scores.

In the **Example** section [4], the calculation updates based on your select parameter. The average is rounded to the next two decimals. If there is only one result, the single score will be displayed.

Select Decaying Average

Select Decaying Average

To average assessment item scores with a greater weight for the most recent assessment item, select the **Decaying Average** option [1].

The Decaying Average calculation uses a formula to determine proficiency based on students' average scores, giving more weight to the most recent scored. To determine the weight given to the most recent score, the formula uses a decay rate. The higher the formula's decay rate, the more heavily the most recent assessment is weighted.

By default, the decay weight is set to 65% in the **Parameter** field [2]. However, you can adjust the rate to any percentage between 50% and 99% using the **Arrow** icons [3]. Between two assessments, the most recent assessment gets 65% weight and the first gets 35%. For each additional assessment, the sum of the previous score calculations decay by an additional 35%.

For example, a student has scores of 1, 2, 3, 4 (scores listed chronologically from oldest to most recent):

$$(1 \times .35) + (2 \times .65) = X$$

$$(X \times .35) + (3 \times .65) = Y$$

$(Y \times .35) + (4 \times .65) = Z$ (this being the current standard score; 3.48)

Select n Number of Times

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To set a number of times that a student must meet or exceed mastery on a set amount of aligned items, select the **n Number of Times** option [1].

Enter the number of times mastery must be achieved in the **Parameter** field [2]. You can also increase or decrease the parameter by using the **Arrow** icons [3]. The Parameter field accepts numbers between 1 and 5.

Any scores that do not meet mastery are not used in the calculation.

Select Most Recent Score

Select Most Recent Score

To select the score for the recently graded item, select the **Most Recent Score** option [1].

You can view an example of the Most Recent Score calculation in the **Example** section [2].

Select Highest Score

Select Highest Score

To select the highest score from all assessment items, select the **Highest Score** option [1].

You can view an example of the Highest Score calculation in the **Example** section [2].

Select Average

Select Average

To select the average score from all assessment items, select the **Average** option [1].

You can view an example of the Average calculation in the **Example** section [2].

Save Calculation Method

Save Calculation Method

To save your calculation method, click the **Save Mastery Calculation** button.

Confirm Calculation Changes

Confirm Calculation Changes

To confirm your changes to the mastery calculation, click the **Save** button.

[Content retrieved from <https://community.canvaslms.com/t5/Instructor-Guide/How-do-I-manage-outcome-mastery-calculations-in-a-course/ta-p/429019>]

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