



MOODLE GRADEBOOK IN PLAIN ENGLISH

Grade Aggregation

In Moodle, **Aggregation** means how grades are calculated in a category or a gradebook overall. If you do not create distinct categories within a gradebook, Moodle simply treats all grades as one category.

Understanding the Ways Moodle Can Calculate Grades

Moodle provides several methods for final grade calculation, each based on methods traditionally used by faculty. Unfortunately, the “names” Moodle ascribes to those methods makes little sense to most users. Here is how to select an overall grade scheme for your course.

Natural: Points Earned Divided by the Points Possible

This grading scheme is probably the most straight forward. To calculate a student’s grade, Moodle simply totals up the number of points a student earned then divides it by the number of points possible. For example:

$$\frac{45}{50} + \frac{40}{50} + \frac{40}{50} + \frac{50}{50} =$$

$$175 \div 200 = .875 \text{ or } 87.5\%$$

This calculation method does allow for extra credit items. Moodle adds bonus points only to the student’s points earned.

Mean of Grades: Every Grade Counts Equally, No Matter the Point Value

Under this system, Moodle calculates a percentage grade for each item; Moodle then adds up the percentage grades and divides by the number of grade items. For example:

$$\frac{10}{10}, \frac{9}{10}, \frac{8}{10}, \frac{10}{10}, \frac{100}{100} \text{ then,}$$

$$\frac{1.0 + .9 + .9 + 1.0 + 1.0}{5} = .94 \text{ or } 94\%$$

This calculation methods allows instructors to accurately drop a specified number of the lowest grades or retain a specified number of the highest grades from the category.

Simple Weighted Mean: Points Possible Determines an Item's Weight

Simply put, the more points you assign to an item, the more weight Moodle gradebook assigns that item. Moodle does so by calculating the percentage grade for each item, multiplies that percentage by the points possible for that item, sums that total, then divides by the number of points possible. For example:

$$\frac{10}{10}, \quad \frac{9}{10}, \quad \frac{80}{100}, \quad \frac{100}{100}, \quad \frac{100}{100} \text{ then,}$$

$$\frac{(1.0 * 10) + (.9 * 10) + (.8 * 100) + (1.0 * 100) + (1.0 * 100)}{320} =$$

$$\frac{10 + 9 + 80 + 100 + 100}{320} = .934 \text{ or } 93.4\%$$

This calculation method does allow for extra credit items. Moodle adds bonus points only to the student's points earned.

Weighted Mean: Instructor Determines Weight Regardless of Points Assigned to Item

This grading scheme allows faculty to establish the weight of each item. In other words, two items with the same point values can carry different weights in the final calculation. Moodle does this by calculating a percentage grade for each item, multiplying those percentages by each assigned weight, summing those up, then dividing by the total weights available. For example:

$$\frac{10}{10} \text{ weight } 10\%, \quad \frac{9}{10} \text{ weight } 15\%, \quad \frac{8}{10} \text{ weight } 25\%, \quad \frac{10}{10} \text{ weight } 25\%, \quad \frac{10}{10} \text{ weight } 25\%$$

$$\frac{(1.0 * 10) + (.9 * 15) + (.8 * 25) + (1.0 * 25) + (1.0 * 25)}{10 + 15 + 25 + 25 + 25} =$$

$$\frac{10 + 13.5 + 20 + 25 + 25}{100} = .935 \text{ or } 93.5\%$$

This calculation method allows for two different ways of thinking about grade weights. First, the percentages can easily be set to add to 100%. Second, it allows for relative weighting if an instructor wants one item to count twice as much as a different item. For instance, an item can be given a weight of 1; then, an item worth twice as much in the final calculation is given a weight of 2.

The Way Grades are Displayed to Students

Moodle makes it possible to display grades in a number of different formats students, and different grades can be displayed using different formats. While Moodle records and calculates all grades by points and percentages, you can determine how each grade is displayed to students.

The Three Basic Formats

Moodle provides three basic options for displaying grades:

- **Real** means that the points earned will be displayed.
- **Percentage** means that student's percentage grade (based on points earned divided by points possible) will be displayed.
- **Letter** means that an actual letter grade will be displayed, based on the grading scale used system wide in the UMW Moodle site. Faculty can establish a letter-grade system for a particular course, but they must first set up that grade scale then tell Moodle to override the system-wide scale. Only one Letter grade system can be used in each course.

Moodle allows instructors to set a single format for a grade item or combine any of the two for display.

Grade Item Types

Moodle offers three types of gradebook items. Each has a slightly different function and input method. Importantly, once a grade is created, the type cannot be changed; therefore, make sure that you're using the correct type.

- **Value** grades are numerical, representing the points earned on an assignment. The teacher adds these grades by inputting a number into the appropriate box.
- **Scale** grades are a specialized grade lists that can be selected from a dropdown menu. After a scale has been established, Moodle assigns a numerical value to each level of the scale, beginning with 0% for the lowest level. *Note: When using some aggregation methods, Moodle will not display the "range" of grades correctly.*
- **Text** items simply allow teachers to enter text, essentially defaulting to only display the feedback provided. These items are not included in a student's grade calculation.

The default grading type is **Value**. Several scales are already available in Moodle and custom ones can be created and then, if desired, be made available systemwide.