## How are grades calculated in a points Gradebook?

Course grade calculations depend on your Gradebook's organization and grade entry setting, points (described here) or percentages:

- No categories (default) - Each gradebook item is assigned a simple point value. The course grade is determined by the student's total score divided by the total points possible.
- Categories only - Categories are used to group gradebook items, where items are assigned a simple point or percentage value. Similar to a gradebook with No categories, the course grade is determined by the student's total score divided by the total points possible. This structure provides the option to drop the lowest grade(s), keep the highest grade(s), or drop the highest grade(s) within a category.
- Categories \& weighting - Items are grouped into categories, where each category is assigned a percentage of the course grade. The total score of all items in a category will comprise the category's percentage of the course grade. This structure provides the option to drop the lowest grade(s), keep the highest grade(s), or drop the highest grade(s) within a category.

8 Tip: To award students extra credit points, you can create extra credit items or categories, as described in How does extra credit work in Gradebook?
(1) Note: To edit the point value of an item added to the gradebook from another tool, such as Assignments or Tests \& Quizzes, go to the item's tool of origin, e.g., Assignments. For more information, see How do I add and edit gradebook items from Assignments, Tests \& Quizzes, or Lessons?

## No categories



In a default gradebook with No categories, course grades are calculated for each student by dividing the sum of their scores received for all graded items by the total points possible for those items.

In the example pictured above, Student Five earned a total of 72 points out of 80 total points possible. His course grade is $72 / 80=0.90$ ( $90 \%$ ).
(1) Note: Ungraded items are not included in a student's course grade. Leaving a grade entry blank reduces the total points possible by the point value of the ungraded item for that student.

In the example pictured above, most students were graded out of $\mathbf{8 0}$ total points. However, Student Three has not received a grade for Homework 2 (10 points possible). Thus, her course grade is 59/70 $=0.8429$ (84.29\%).

## Categories only



With Categories only, course grades are calculated the same as in a gradebook with No categories (described above). However, if all items in a category have the same total point value or the category has the Equal Weight option enabled, you can automatically drop the lowest or highest grades, or keep the highest grades within that category. Dropped grades are omitted from the course grade calculation, and the total points possible in the category are reduced by the point value(s) of the omitted item(s).

For more information on grade calculations when grades are dropped/kept, see How does Gradebook calculate automatically dropped grades? For more information on equal weight categories, see How does Gradebook calculate grades with an equal weight category?
(1) Note: You must assign each item to a category for the item to be included in students' course grades. For steps to assign existing items to categories, see How do I edit or delete a gradebook item?

Ungraded items are not included in a student's course grade. Leaving a grade entry blank reduces the total points possible by the point value of the ungraded item for that student.

## Categories \& Weighting

Use Categories \& weighting to group gradebook items into categories, and weight each category as a percentage of the total course grade. The sum total of all category percentages must equal 100\% (or more, if there is an Extra Credit category - for more information, see How does extra credit work in Gradebook?)

For example, if Exams are worth 20\% of the course grade, the Exams category (20\%) could include a Midterm Exam (50 points) and Final Exam (100 points).

Each student's course grade is the sum of the categories' weighted averages. See below for additional information about dropping and keeping grades, and example calculations.
(1) Note: You must assign each item to a category for the item to be included in students' course grades. For steps to assign existing items to categories, see How do I edit or delete a gradebook item?

Ungraded items are not included in a student's course grade. If any grade entry is left blank, the total points possible within the category are reduced by the point value(s) of the ungraded item(s) for that student.

## Dropping and keeping grades

If all items in a category have the same total point value or the category has the Equal Weight option enabled, you can automatically drop the lowest or highest grades or keep the highest grades within that category. Dropped grades are omitted from the course grade calculation, and the total points possible in the category are reduced by the point value(s) of the omitted item(s).

For more information on grade calculations when grades are dropped/kept, see How does Gradebook calculate automatically dropped grades? For more information on equal weight categories, see How does Gradebook calculate grades with an equal weight category?

## Categories \& Weighting - Example Calculations

Below is an example of how a Gradebook with three weighted categories, Exams (20\%), Assignments (40\%), and Quizzes (40\%), would calculate a student's grade.


## The Gradebook calculates the weighted average in each category by:

1. Totaling the student's scores for all graded items in the category.

In the example pictured above, in Exams, Student One earned: Final Exam (95 points) + Midterm Exam (40 points) = 135 points.
2. Totaling the point values for all graded items in the category.

Final Exam (100 points) + Midterm Exam (50 points) = 150 total points.
3. Dividing the student's score by the total points, then multiplying that number by 100, to determine the category average:

Student One's category average in Exams is 90\%:

- 135/150 = 0.90
- $0.90 \times 100=90 \%$

4. Applying the weight to the category average.

Because the Exams category is worth $\mathbf{2 0 \%}$ of the course grade, Student One's weighted average is 18:

- To get $20 \%$ of a number, multiply the number by 0.2 .
- $90 \times 0.2=18$

8 Tip: The category average is shown in a column to the right of the gradebook items in that category. The column header includes the name of the category.

## The Gradebook totals the weighted averages to produce the course grade.

If Student One received a category average of $\mathbf{7 5 \%}$ for Assignments and $\mathbf{8 5 \%}$ for Quizzes, his course grade is $\mathbf{8 2 \%}$, calculated as follows:

- Exams (20\%) weighted average (shown above) $=18$
- Assignments (40\%) weighted average $=0.4 \times 75=30$
- Quizzes (40\%) weighted average $=0.4 \times 85=34$
- Course Grade $=18+30+34=82$

