Strategy 1: Items weighted by their point values

By default, Moodle computes a course grade based on the total number of points (or marks) earned, divided by the number of points possible. Therefore, if your course has two midterm tests, each worth 50 points, and a final exam worth 100 points, the final exam counts twice as much as each of the midterm tests.

Moodle calls this Aggregation method of computing course grades Simple weighted mean of grades because items are weighted based simply on their maximum point value.

Note that in version 1.9, by default, items are not computed into the grade until a score is assigned. This means that you can post your activities as far in advance as you wish; students always see a grade based only on what has been marked. You can change this to have all non-graded items be counted as zero if you wish.

Exercise

1. In a sample course of three students, create three assignments titled “10 point assignment”, “20 point assignment”, and “50 point midterm”.
2. Assign scores to each of the assignments as shown in the example:

<table>
<thead>
<tr>
<th>First name / Surname</th>
<th>10 point homework</th>
<th>20 point homework</th>
<th>50 point midterm</th>
<th>Course total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Dougiamas</td>
<td>8.00</td>
<td>16.00</td>
<td>-</td>
<td>80.00</td>
</tr>
<tr>
<td>Helen Foster</td>
<td>-</td>
<td>18.00</td>
<td>-</td>
<td>90.00</td>
</tr>
<tr>
<td>Eloy Lafuente</td>
<td>10.00</td>
<td>11.00</td>
<td>-</td>
<td>70.00</td>
</tr>
<tr>
<td>Overall average</td>
<td>9.00</td>
<td>15.00</td>
<td>-</td>
<td>80.00</td>
</tr>
</tbody>
</table>

3. Verify that the course grade is as you desire.
4. Change various scores and confirm that the gradebook is computing the course grade in the way you want. If not, you might want to make additional changes to your gradebook setup.
Strategy 2: Items all given equal weight

In some courses, the number of points (or marks) given to an item is arbitrary and is not a factor in deciding its weight in computing the course grade. In this case, each assignment is given equal weight, so a 10 point essay might be worth just as much as a 20 point essay. With this grading strategy, one would first convert each item to a percentage value and then average the percentages in computing the course total.

Moodle calls this Aggregation method of computing grades Mean of grades because the average is computed by giving the same weight to each item.

Exercise (begin with the example from the first exercise)

1. From the view menu in the gradebook, select “Categories and items”.
2. Click the “Edit” icon for your course.
3. Change Aggregation to Mean of grades.
4. Verify that the course grade works like this example:

<table>
<thead>
<tr>
<th>First name / Surname</th>
<th>10 point homework</th>
<th>20 point homework</th>
<th>50 point midterm</th>
<th>Course total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Dougiamas</td>
<td>8.00</td>
<td>16.00</td>
<td>-</td>
<td>80.00</td>
</tr>
<tr>
<td>Helen Foster</td>
<td>-</td>
<td>18.00</td>
<td>-</td>
<td>90.00</td>
</tr>
<tr>
<td>Eloy Lafuente</td>
<td>10.00</td>
<td>11.00</td>
<td>77.50</td>
<td></td>
</tr>
<tr>
<td>Overall average</td>
<td>9.00</td>
<td>15.00</td>
<td>82.50</td>
<td></td>
</tr>
</tbody>
</table>

5. Change various scores and confirm that the gradebook is computing the course grade in the way you want. If not, you might want to make additional changes to your gradebook setup.
Strategy 3: Course grade weighted by category

In many courses, the teacher may want to assign different elements of performance (such as daily work and tests) to defined percentages in determining a course grade.

Moodle calls this Aggregation method of computing course grades Weighted mean of grades because the course grade is computed by weights that the teacher assigns to categories (or items).

Note:

- Once your gradebook is set up, you can put activities into categories when you create or edit the activity (like and assignment or quiz).
- You can also change item categories from the Categories and items view of the gradebook.
- You can keep an item from being factored into the course grade by not placing it in a weighted category.
- Category weights do not have to add to 100. If you have two categories with weights of 1 and 2, the second is given twice as much value in computing the course grade.

**Exercise** (begin with the example from the earlier exercises)

1. From the view menu in the gradebook, select “Categories and items”.
2. Click the “Edit” icon for your course (the top item in the gradebook) and change Aggregation to Weighted mean of grades.
3. From the same “Categories and items” view, click the button “Add category”. Add two categories: "Daily work 40%" and "Tests and Exams 60%" with a weight of 40 and 60. Within the "Daily work 40%" category, keep Aggregation type as “Simple weighted mean of grades”.
4. For the existing items in the gradebook, click the “move” icon and place the items in appropriate categories.
5. Going back to your main course, add a new assignment called "100 point final". Note that you can place items into categories when you create or edit them.
6. Assign scores to each of the assignments as given in this example (note that Helen's first assignment score was changed to a zero.)

<table>
<thead>
<tr>
<th></th>
<th>Daily Work 40%</th>
<th>Math 101</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 point homework</td>
<td>20 point homework</td>
</tr>
<tr>
<td></td>
<td>Category total</td>
<td>50 point midterm</td>
</tr>
<tr>
<td>Martin Dougiamas</td>
<td>8.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Helen Foster</td>
<td>0.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Eloy Lafuente</td>
<td>10.00</td>
<td>11.00</td>
</tr>
<tr>
<td>Overall average</td>
<td>6.00</td>
<td>15.00</td>
</tr>
</tbody>
</table>

7. Change various scores and confirm that the gradebook is computing the course grade in the way you want. If not, you might want to make additional changes to your gradebook setup.
Establishing grade categories
(p. 4-5 Lafayette College Information Technology Services, http://its.lafayette.edu/help/moodle/gradebooksettings)

If you select a strategy above that suggests you should use categories, it is easiest to establish these categories prior to adding assignments or manual grade columns. This gives you the ability to designate the category (exams, quizzes, labs, etc.) when you create the assignment. Categories simply allow you to group assignments and alter settings to affect these grouped grades.

To add new categories:

1. Select Grades from your course "Administration" block.
2. From the "Choose an action..." dropdown in the top left corner, select Categories and items.
3. Click [Add category] at the bottom of the screen.
4. You need to determine the settings for this particular category:
   a. Give the category a name, i.e., Exams, quizzes, labs...
   b. Determine the aggregation type. Usually set this to the same aggregation type as you have selected for the overall gradebook. However, it is possible to select a different aggregation type for a category. Just be careful as this can have unexpected results.
   c. Parent category designates the category into which the new category is being added. For most categories this should be the name of the course.
   d. Aggregation coefficient/Item weight: The weight of the category in relation to the other categories.
   e. [Save changes] to return to the grader report.

To assign assignments to categories after they are created:

If assignments are added without a category assigned, they will be assigned to the parent or course category. To assign items to a category:

1. From the "Choose an action..." dropdown in the top left corner, select Categories and items.
2. Notice that categories (designated by a folder) and graded items appear in an outline format. Organize the outline so assignments belonging to a category are indented under the category name. To do this:
3. Click the move arrows of the Category or Grade item to be moved.
   This refreshes the screen. Click in the dashed box where the Category or Grade item should be placed.

Adding manually graded items

To add new grade columns to the grader report without adding an activity to the course page:

1. From the "Choose an action..." dropdown in the top left corner of the Grades, select Categories and items.
2. Click [Add grade item] at the bottom of the screen.
3. Give the item a name and grade type and adjust other settings as necessary.
4. [Save changes] to return to the grader report.
Entering/Editing grades

A feature of the new gradebook is the ability to quickly enter or edit grades in a spreadsheet type view. This also allows you to enter grades with decimal points.

To access this view, go to the grader report by clicking Grades in the "Administration" block for the course and selecting Grader report from the dropdown in the top left corner if necessary.

1. Click [Turn editing on] in the top right corner. This should add text entry boxes for each grade along with editing icons.
2. To enter a grade, click into the box for the student and assignment and enter a score. To enter multiple grades, hit tab to move between text entry boxes. When you finish entering grades, click the [Update] button at the bottom of the screen to save the grades.

Why some grades may turn a new color

Entering a grade from the grader report causes the grade to be flagged as "Overwrite," meaning you have manually entered a grade rather than using the grade sheet for a specific assignment. This is not a problem; it is just an alert that this grade has been manually overwritten. This does, however, finalize the grade and will not let you change the grade in any page other than the grader report.

Extra credit

In some cases, you may decide after the gradebook is established as above, that you want to add optional extra credit assignments to a particular category. Only two aggregation types allow for extra credit: Sum of grades and Mean of grades (with extra credits). You will need to change the category Aggregation type to one of these so you are able to specify extra credit. We recommend using Sum of Grades; it allows you to add an extra credit assignment of any point value.

1. Select the edit icon for the category where you want to apply extra credit.
2. Change the "Aggregation type" to Sum of grades and save the changes on the page.
3. Click the edit icon for the extra credit item within that category.
4. In the section labeled "Parent Category" there should now be a check box or a text field labeled "Extra Credit." Checking the box or entering a value greater than 0 treats this grade item's grade as Extra Credit during aggregation. The number is a factor by which the grade value will be multiplied before it is added to the sum of all grades, but the item itself will not be counted in the division. (So if you set the maximum value of the extra credit assignment to 5 and want it to be worth 5, put 1 in this extra credit field.)
5. Save the changes and return to the Grader report.

Figuring in make-up assignments

If you give a make-up assignment and want this to be added as a new gradebook column, you can follow the extra credit recommendation above that uses the Sum of Grades aggregation type to add the extra points.

By using the aggregation type "Mean of grades (with extra credits)" the mean of the make-up assignment will be taken and that mean score will be used to calculate the category total. This method is only recommended if the student is receiving a zero for the original assignment and a grade for the make-up.

You may also set the aggregation type to Mean of grades (with extra credits).