How do I set up a Gradebook with categories and weighting?
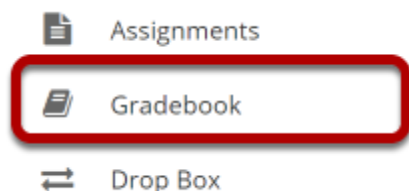
In this scenario, we will pretend that you have homework, projects, a midterm, and a final to grade. You would like the weighting to be as follows:

- 3 Homework assignments - 24% of the total grade
- 2 Projects - 26%
- 1 Midterm - 20%
- 1 Final - 30%

The percentages of all the weighting must add up to 100%.

It is easiest to set up your Gradebook first, and then create or add items to the Gradebook. But don't worry, if you have already set up your Gradebook items (homework assignments, projects, etc), you can come back and do this setup later and then assign the Gradebook items to the appropriate categories. It is also easy to add categories and even change the weighting of grades at any time.

Go to Gradebook.

Click the Settings tab.

Click to expand the Categories and Weighting section.

Select the Categories & weighting radio button.

Additional options will display once you select categories and weighting.

Enter categories and percentage weighting.

1. Click the **Add a category** button to add more categories.
2. For this example, enter each category as follows: Homework 24%, Projects 26% , Midterm 20%, and Final 30%.
3. Click **Save Changes** when you finished adding categories.

Click the Grades tab.
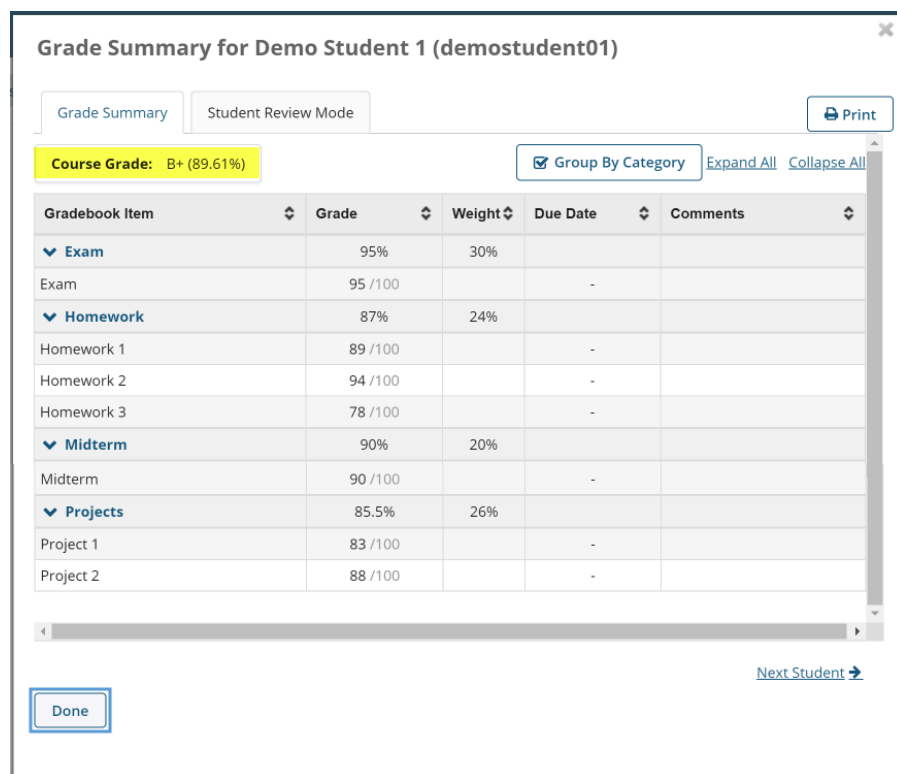
Click Add Gradebook Item to create items and associate them with the appropriate categories.

1. Add seven Gradebook items: Homework 1, Homework 2, Homework 3, Project 1, Project 2, Midterm, Final. The title for the first item is shown in the image above.
2. For the sake of this example we will assign 100 points for every item.
3. Make sure to assign each Gradebook item to the appropriate category. All three Homework items should be assigned to the Homework category, both Project items should be assigned to the Projects category, the Midterm to the Midterm category, and the Final to the Final category. It may not feel intuitive to have categories with only one Gradebook item, but having all the grades accounted for at the category level is what allows us to control the weighting.
4. Be sure to check the boxes next to **Release item to students?** and **Include item in course grade calculations?** for each item.
5. Click **Create** to save the item.

Note: You may also assign items from other tools, such as Assignments or Tests & Quizzes, to specific categories when you create them.

To test our scenario:

Grade Summary for Demo Student 1 (demostudent01)

| Grade Summary | Student Review Mode | | | | | Print |

Course Grade: B+ (89.61%)   ☑ Group By Category   Expand All   Collapse All

Gradebook Item	Grade	Weight	Due Date	Comments
⌄ **Exam**	95%	30%		
Exam	95 /100		-	
⌄ **Homework**	87%	24%		
Homework 1	89 /100		-	
Homework 2	94 /100		-	
Homework 3	78 /100		-	
⌄ **Midterm**	90%	20%		
Midterm	90 /100		-	
⌄ **Projects**	85.5%	26%		
Project 1	83 /100		-	
Project 2	88 /100		-	

Next Student →

Done

Let's say demostudent01 has earned the following points:

- Homework 1 - 89 out of 100
- Homework 2 - 94 out of 100
- Homework 3 - 78 out of 100
- Project 1 - 83 out of 100
- Project 2 - 88 out of 100
- Midterm - 90 out of a 100
- Final - 95 out of a 100

The Gradebook will automatically calculate the weighting for you. In this case the final score is 89.61%

How does it come up with 89.61%?

- The average of the homework is (89+94+78)/300 points possible. Total = 87%
- The average of projects is (83+88)/200 points possible. Total = 85.5%
- Midterm and Final only have one grade in those categories, therefore the category average is equal to the score/points possible (90/100 and 95/100 respectively).

Now apply the weighting:

- (.87 homework * .24 weighting) = .2088
- (.8550 projects * .26 weighting) = .2223
- (.9 midterm * .20 weighting) = .18

- (.95 final * .30 weighting) = .2850
- Add them up = .8961 = 89.61%

If you try this example and don't get the same results, you might want to go back and double check the following:

- The category weighting is set up with the scenario percentages.
- Each Gradebook item is assigned to the correct category.
- Each Gradebook item is released to students and included in Gradebook calculations (two checkboxes).
- The student grades were entered correctly.