

PowerTeacher Gradebook permits teachers to set up term grade calculations using Total Points, Term Weights (for end-of-course grade) and Category Weights. This document illustrates how Gradebook calculates grades based on the chosen calculation method and the settings applied.

**I. TOTAL POINTS**

Teachers preferring to use the Total Points method for calculating term grades will adjust the settings on the **Grade Setup** tab. In this example, **Total Points** has been selected as the final grade calculation method on the **Grade Setup** tab in PowerTeacher Gradebook for a Semester 2 course.

Calculate final grade using:

- Total points
- Term weights
- Category weights

Number of low scores to discard:

▲	Name	Weight	Percent	Drop Low

Four assignments have been added as follows:

Name	Abrv	Category	Points Possible	Weight	Date Due ▲
Homework 1	HK1	Homework	10	1.00	02/06/2009 Fri
Quiz 1	QZ1	Quiz	20	1.00	02/10/2009 Tue
Test 1	TST1	Test	100	1.00	02/20/2009 Fri
Project 1	PRJ1	Project	50	1.00	02/27/2009 Fri

The following scores have been added for each assignment for one student:

Reporting Term: Q3 | Mode: Assignments | Final Grades

Students (28)	(Q3) Final Grade	Homework 1 02/06/2009 pts: 10	Quiz 1 02/10/2009 pts: 20	Test 1 02/20/2009 pts: 100	Project 1 02/27/2009 pts: 50
Batt, Babu	84 83.889%	8	15	88	40
Butterfield, Nicholas	--				
Earl, Chantel	--				

Using the Total Points method, the Q3 grade is calculated as follows:

$$\begin{aligned} \text{Q3 Grade} &= (\text{Total Pts Earned})/(\text{Total Pts Possible}) \\ \text{Q3 Grade} &= (8 + 15 + 88 + 40)/(10 + 20 + 100 + 50) \\ \text{Q3 Grade} &= 151/180 \\ \text{Q3 Grade} &= 0.83889 \\ \text{Q3 Grade} &= 84 \end{aligned}$$

The Effect of Weighting Assignments

Changing the assignment weighting affects the calculation. If we change the weighting on the assignment **Quiz 1** from 1.00 to 2.00, it has the following result:

$$\begin{aligned} \text{Q3 Grade} &= (\text{Total Pts Earned})/(\text{Total Pts Possible}) \\ \text{Q3 Grade} &= (8 + 30 + 88 + 40)/(10 + 40 + 100 + 50) \\ \text{Q3 Grade} &= 166/200 \\ \text{Q3 Grade} &= 0.83000 \\ \text{Q3 Grade} &= 83 \end{aligned}$$

Points earned and points possible are altered with weighting

With the assignment weighting changed, Gradebook now treats Quiz 1 as though the points possible value is double – 40 instead of 20. Additionally, the points earned by the student are also doubled in the calculation – 30 instead of 15. The result is that the quiz grade (equivalent to a grade of 75%) is counted twice (weighted 2.00). This change ends up having a slightly negative effect on the student grade since the quiz grade was on the low side.

The Effect of Dropping Scores

When using the Total Points calculation method, teachers have the option to drop low grades from the final grade calculation using the *Number of low Scores to discard* setting on the Grade Setup tab. By default, the setting is 0. For our Q3 final grade example, we will now change the setting to **1** to drop the single lowest student grade.

Calculate final grade using:

- Total points
- Term weights
- Category weights

Number of low scores to discard:

▲	Name	Weight	Percent	Drop Low

The lowest grade to be dropped in this case is the **Quiz 1** grade. The student scored 15 out of 20 – equivalent to a grade of 75%. With this score now dropped from the Q3 calculation, we get the following result:

**Q3 Grade = (Total Pts Earned)/(Total Pts Possible)**  
**Q3 Grade = (8 + 88 + 40)/(10 + 100 + 50)**  
**Q3 Grade = 136/160**  
**Q3 Grade = 0.85000**  
**Q3 Grade = 85**

With the lowest score no longer hurting the student’s average, the Q3 final grade rises slightly to 85%.

**II. CATEGORIES**

Teachers preferring to use the Category method for calculating term grades will adjust the settings on the **Grade Setup** tab. To do this, first select the term you want, and then select the **Category** weights radio button. Next add categories to the calculation by clicking the **Add Category** button and checking the boxes for all categories to be included.

Calculate final grade using:

Total points      Number of low scores to discard: 0  
 Term weights  
 **Category weights**

▲	Name	Weight	Percent	Drop Low

        

**Note:** You can drop low scores from a category by entering the number of low scores you want to drop in the Drop Low column.

In this example, the categories **Homework**, **Project**, **Quiz**, and **Test** have all been selected for inclusion in the Q3 term grade calculation. Next, apply the desired weighting to the selected categories by clicking the **Weight** column next to each category and entering the appropriate weight. For our example, we will use the weighting pictured.

Select Categories

Category	Abbreviation
<input type="checkbox"/> Extra Credit	EC
<input checked="" type="checkbox"/> Homework	HW
<input type="checkbox"/> Mid-term Exam	M1 Exam
<input type="checkbox"/> Monthly Test	MT
<input type="checkbox"/> Non-Graded	NG
<input type="checkbox"/> Oral Presentation	OP
<input checked="" type="checkbox"/> Project	PROJ
<input checked="" type="checkbox"/> Quiz	QZ
<input type="checkbox"/> Term Papers	TP
<input type="checkbox"/> Points	TST
<input type="checkbox"/> Total Pts	Total Pts
<input type="checkbox"/> Voluntary	VOC

  

Calculate final grade using:

Total points      Number of low scores to discard: 0  
 Term weights  
 **Category weights**

▲	Name	Weight	Percent	Drop Low
	Homework	10	10.0%	0
	Project	20	20.0%	0
	Quiz	20	20.0%	0
	Test	50	50.0%	0

**Note:** As weighting is entered, the figure in the **Percent** column will adjust accordingly.

Using the same grades from the previous Total Points example, the Q3 grade would be calculated as follows:

$$\begin{aligned} \text{Q3 Grade} &= ((\text{Homework Pts Earned}/\text{Homework Pts Possible}) \times (\text{Homework Category Weight})) + ((\text{Project Pts Earned}/\text{Project Pts Possible}) \times (\text{Project Category Weight})) \\ &\quad + ((\text{Quiz Pts Earned}/\text{Quiz Pts Possible}) \times (\text{Quiz Category Weight})) \\ &\quad + ((\text{Test Pts Earned}/\text{Test Pts Possible}) \times (\text{Test Category Weight})) \\ \text{Q3 Grade} &= (8/10)(10) + (40/50)(20) + (15/20)(20) + (88/100)(50) \\ \text{Q3 Grade} &= (.8)(10) + (.8)(20) + (.75)(20) + (.88)(50) \\ \text{Q3 Grade} &= 8 + 16 + 15 + 44 \\ \text{Q3 Grade} &= 83 \end{aligned}$$

**III. TERM WEIGHTS**

To calculate the course final (Y1) grade, Term Weights are typically used. The Y1 grade is reliant upon the grades earned in earlier terms. In our example of an S2 course, the final grade can be calculated from the Q3 and Q4 grades along with the L6 (local exam) grade. The exact terms available at your school are determined by the Final Grade Setup completed for your school. Consult your PowerSchool Administrator for additional details.

To set up Term Weights, go to the **Grade Setup** tab for the course section you are working with. Select the Y1 Reporting Term. Next select the **Term weights** radio button – the table will be populated with the terms that are available for inclusion in the final grade calculation for this section.

In the example here, Q3, Q4, L6, R6 and C6 are available for final grade calculation. For the Y1 grade we will use Q3, Q4 and L6 only. (C6 (June RCT exam) and R6 (June Regents) are unlikely to be used for a Semester 2 course.)

Click in the **Weight** column to adjust the weights you want to use accordingly. In this example, Q3 and Q4 each count 40% and the final exam counts 20%. The other terms are set to 0.

If student’s grades are: Q3 - 83.889%, Q4 – 91.525%, L6 – 94.000, the calculation will be:

$$\begin{aligned} \text{Y1} &= (\text{Q3 grade})(\text{Q3 term weight}) + (\text{Q4 grade})(\text{Q4 term weight}) + (\text{L6 grade})(\text{L6 term weight}) \\ \text{Y1} &= (83.889)(40) + (91.525)(40) + (94.000)(20) \\ \text{Y1} &= 3355.56 + 3661 + 1880 \\ \text{Y1} &= 8896.56 \text{ (which converted to a percent} = 88.966\%, \text{ or a letter grade of 89)} \end{aligned}$$

Reporting Term	Start	End
Y1	02/02/2009 Mon	06/30/2009 Tue
Q3	02/02/2009 Mon	04/19/2009 Sun
Q4	04/20/2009 Mon	06/15/2009 Mon
L6	06/16/2009 Tue	06/17/2009 Wed
R6	06/18/2009 Thu	06/19/2009 Fri
C6	06/22/2009 Mon	06/23/2009 Tue

  

Name	Weight	Percent	Drop Low
Q3	40	40.0%	n/a
Q4	40	40.0%	n/a
L6	20	20.0%	n/a
R6	0	0.0%	n/a
C6	0	0.0%	n/a