Weighted grade: the formula, a worked example and your own categories

Course grade = sum of (weight x score) / sum of weights. When the weights add to 100 the grade is the sum of the contributions (weight x score / 100). When they do not, divide by their real total; a category with no mark yet is left out and the rest are scaled up, which is what gradebooks do.

Worked example (20 / 20 / 40 / 20)

Category	Weight	Score	Contribution
Homework	20%	95%	19.00 points
Quizzes	20%	82%	16.40 points
Tests	40%	78%	31.20 points
Final exam	20%	85%	17.00 points
Course grade	100%		83.60% = B (plus-minus) / B (10-point)

Your categories

Category (from the syllabus)	Weight %	My score %	Weight x score / 100
Total			

If the weights total 100, the grade is the sum of the last column. If not, the grade is (sum of weight x score) / (sum of weights).

From sciencewithshobha.com/blog/weighted-grade-calculator-categories-with-weights-to-one-course-grade-the-formula-what-happens-when-the-weights-do-not-add-to-100-points-systems-and-a-what-if-table/ · 1-on-1 online maths and science, Grades 6 to 12, free 30-minute first class.

What moves the grade, the letter scales and the points-system check

Five more points in a category move the course grade by

Category weight	+5 points	+10 points	+15 points	+20 points
5%	0.25	0.50	0.75	1.00
10%	0.50	1.00	1.50	2.00
15%	0.75	1.50	2.25	3.00
20%	1.00	2.00	3.00	4.00
25%	1.25	2.50	3.75	5.00
30%	1.50	3.00	4.50	6.00
35%	1.75	3.50	5.25	7.00
40%	2.00	4.00	6.00	8.00
50%	2.50	5.00	7.50	10.00
60%	3.00	6.00	9.00	12.00

Weighted system or points system?

	Weighted (percentage) system	Points system
What is fixed	each category's share of the grade	each assignment's point value
One 10-point quiz in a 20% category of four quizzes	5% of the course grade	10 points out of the course total
The grade	this sheet's formula	points earned / points possible
Convert		use each category's total possible points as its weight

The letter scales

Percentage	Plus-minus letter	4.0	10-point letter	4.0
97-100	A+	4.0	A	4.0
93-96	A	4.0	A	4.0
90-92	A-	3.7	A	4.0
87-89	B+	3.3	B	3.0
83-86	B	3.0	B	3.0
80-82	B-	2.7	B	3.0
77-79	C+	2.3	C	2.0
73-76	C	2.0	C	2.0
70-72	C-	1.7	C	2.0
67-69	D+	1.3	D	1.0
65-66	D	1.0	D	1.0
60-64	F	0.0	D	1.0
below 60	F	0.0	F	0.0

Plus-minus scale: Buffalo Public Schools. 10-point scale: North Carolina State Board of Education (every NC high school since 2015-16). Your school's handbook has its own table.

Your plan

Course grade now, and the letter I want: _____

Heaviest category, and my score in it: _____

Points needed there for the next letter: _____

What I will do in that category this month: _____