How to calculate your grade in a class that uses weighted averages by Steve J. Hodges (sthodges@cabrillo.edu)

1. Find the % of your total grade from each grading category
2. Calculate the total number of points that you earned in each category
3. Find the total number of points possible for each grading category
4. For each category, divide the total points you’ve earned by the total points possible for that category
5. For each category, multiply that result by the % that category is worth to get the final result for that category
6. Add all of the final results (one per category) together to get your final grade

Example:
[Step 1]
The final grade in class EX-1 is calculated as follows:
Projects (Homework) 50% (or 0.50)
Exams 40% (or 0.40)
Completion of Lab Hours 10% (or 0.10)

A student in EX-1 achieved the following scores:
Project 1 80/100
Project 2 95/100
Project 3 72/100
Project 4 84/100
Project 5 94/100
Midterm 132/150
Final Exam 142/200
Completed 72 of the 72 required lab hours

[Step 2 and Step 3]
Project Totals: 80+95+72+84+94 = 425 100+100+100+100+100 = 500 points possible
Exam Totals: 132 + 142 = 274 150 + 200 = 350 points possible
Lab Hours: 72 completed 72 required

[Step 4]
(Projects) 425 / 500 = 0.85
(Exams) 275 / 325 = 0.85 (rounded from 0.782857...)
(Lab Hours) 72 / 72 = 1.00

[Step 5]  % of Grade Your Score Multiply
Projects  0.50  0.85  0.50 * 0.85 = 0.425
Exams  0.40  0.78  0.40 * 0.78 = 0.312
Lab Hours  0.10  1.00  0.10 * 1.00 = 0.10

[Step 6]
Final Grade: 0.425 + 0.312 + 0.10 = 0.837 (or 83.7%) and a final grade of "B"

<table>
<thead>
<tr>
<th>Score Required</th>
<th>Letter Grade</th>
<th>Pass / No Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.90 (90%)</td>
<td>A</td>
<td>Pass</td>
</tr>
<tr>
<td>0.80 (80%)</td>
<td>B</td>
<td>Pass</td>
</tr>
<tr>
<td>0.70 (70%)</td>
<td>C</td>
<td>Pass</td>
</tr>
<tr>
<td>0.60 (60%)</td>
<td>D</td>
<td>No Pass</td>
</tr>
<tr>
<td>&lt; 0.60 (&lt; 60%)</td>
<td>F</td>
<td>No Pass</td>
</tr>
</tbody>
</table>
Scenario: I’ve missed x points, can I still get an A?

1. Find the % of your total grade from the category in which you’ve missed points
2. Calculate the total number of points in that category
3. Divide the points that you’ve missed by the total points possible in that category to calculate the percentage for that category.
4. Multiply by the % weight for that category
5. Subtract from 100%.

Example:

A programming class has six programs. The six programs all are weighted the same and are worth 100 points each. Programming assignments are worth 50% of the final grade. You received 50/100 on the first programming assignment and 70/100 on the second assignment and want to know if it is still possible for you to earn an A in the class.

[step 1]
Programs are 50% of the final grade

[step 2]
600 points total for programs (six assignments at 100 points each)

[step 3]
You’ve missed 80 points on the assignments. 80/600 is about 13.3% (This means that you’ve missed about 13.3% of the points available for programs)

[step 4]
13.3% (missed on programs) * 50% (step 1) is about 6.7%

[step 5]
100% – 6.7% = 93.3%
So 93.3% would be the grade that you could potentially earn if you scored 100% on each other portion of the class, so a grade of ‘A’ would still be possible in this case.