WebCT 6 Grade Book: Formulas for Calculated Columns

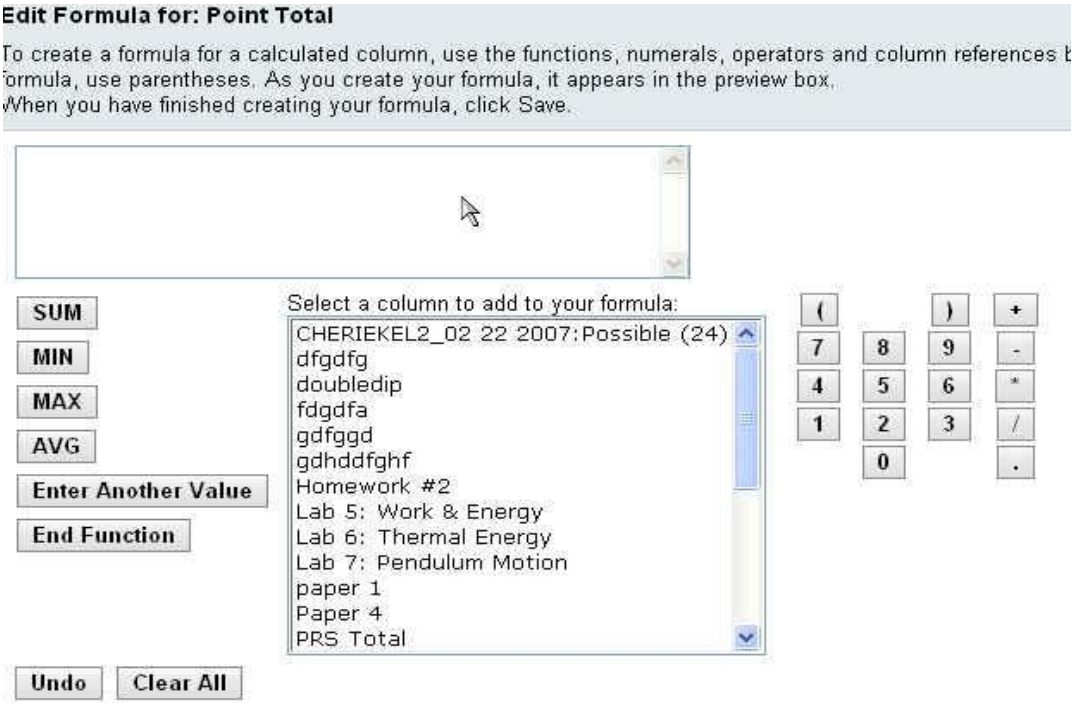

Figure 1

To use these formulas:

1. Create a new column in your Grade Book and choose the option **calculated**.
2. Click on the **action link** next to the column title, and select **Edit Column Formula**. (Figure1)

NOTE: Spaces are included in formulas below for visual clarity. Do not use spaces in Formula Editor. We used quizzes as our example, you may substitute homework, tests, labs, discussion, etc.

1. Calculating Quiz Percentage (Make **"Quiz %"** column; choose **calculated column** option**)**
(This example shows 5 quizzes worth 25 points each, and the total quiz score is 10% of the total semester grade.)
((sum { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] }) * 10) / 125
To do this step-by-step:
Click **left parenthesis** button twice
Function: **sum** (automatically adds left curly bracket)
Column: **Q1**
Click **Enter Another Value** button
Repeat above three steps through last Column (Q5)

Click **End Function** button to end sum list (automatically adds right curly bracket)
Click **right parenthesis** button
Click **multiply** button (*)
Click **number** buttons to enter percent of total grade – 10 in this example
Click **right parenthesis** button
Click **divide** button (/)
Click **number** buttons to enter total number of quiz points – 125 in this example

NOTE: An alternate way to do this is with addition instead of sum function, alternating
Column: Q1; Click Insert button; Click addition button (+)
(([Q1] + [Q2] + [Q3] + [Q4] + [Q5]) * 10) / 125

2. Total Points (Make "Total Points" column; choose calculated column option)
(This example shows that quizzes, tests, homework, discussion, labs, and a project make up the final grade. Each of these has a column made as in #1 above.)
sum { [Quiz %] , [Test %] , [HW %] , [Discuss %] , [Lab%] , [Project %] }

OR

[Quiz %] + [Test %] + [HW %] + [Discuss %] + [Lab%] + [Project %]

3. Drop Lowest Quiz Grade and Find Quiz Percentage
(Make "Quiz %" column; choose calculated column option)
(This example shows 5 quizzes worth 25 points each, the lowest (min) quiz grade is dropped (25 possible points removed from total quiz points), and the total quiz score is 10% of the total semester grade.)

(((sum { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] }) – (min { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] })) * 10) / 100

4. Find Quiz Average
(Make "Quiz Avg" column; choose calculated column option)
(This example shows 5 quizzes worth 25 points each)
(sum { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] }) / 5

5. Drop Lowest Quiz Grade and Find Quiz Average
(Make "Quiz Avg" column; choose calculated column option)
(This example shows 5 quizzes worth 25 points each, the lowest (min) quiz grade is dropped (1 quiz removed from total number of quizzes).
((sum { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] }) – (min { [Q1] , [Q2] , [Q3] , [Q4] , [Q5] })) / 4

[Special thanks to Aditi Patel for providing these formulas].

Another Formula Example:

The final grade for your class is based on two quizzes named Quiz 1 and Quiz 2. All Students performed poorly on these quizzes so you want to add 15% to their final grades. Your formula for the final grade column could be created as follows:

1. Click the SUM function.
2. Under Select a column to add to your formula, click Quiz 1.
3. Click Enter Another Value.
4. Under Select a column to add to your formula, click Quiz 2.
5. Click End Function.
6. Using the numerals and operators, enter *1.15. The completed formula appears in the preview box: SUM{[Quiz 1],[Quiz 2]}*1.15.
7. Click Save.