WebCT Gradebook: Formulas for Calculated Columns

To use these formulas, create a column in Manage Students and choose the option calculated. Use the setup column button to go to the Calculation Editor.

Calculation Editor:
Formula:

NOTE: Spaces are included in formulas below for visual clarity. Do not use spaces in Calculation 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.)

   \[
   \frac{\left( \sum \left\{ [Q1], [Q2], [Q3], [Q4], [Q5] \right\} \right) \times 10}{125}
   \]

   **To do this step-by-step:**
   Click left parenthesis button twice
   Function: sum
   Click Start list button to start sum list (automatically adds left curly bracket)
   Column: Q1
   Click Insert button
   Click Next item button
   Repeat above three steps through last Column (Q5)
   Click End list 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 (+)

\[
( ( [Q1] + [Q2] + [Q3] + [Q4] + [Q5] ) \cdot 10 ) / 125
\]

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.)

   \[
   \text{sum \{} [Quiz \%], [Test \%], [HW \%], [Discuss \%], [Lab\%], [Project \%] \}\n   \]
   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.)

   \[
   ( ( \text{sum \{} [Q1], [Q2], [Q3], [Q4], [Q5] \} ) - ( \text{min \{} [Q1], [Q2], [Q3], [Q4], [Q5] \} ) ) \cdot 10 ) / 100
   \]

4. **Find Quiz Average**
   (Make “Quiz Avg” column; choose **calculated column** option)
   (This example shows 5 quizzes worth 25 points each)

   \[
   ( \text{sum \{} [Q1], [Q2], [Q3], [Q4], [Q5] \} ) / 5
   \]

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).

   \[
   ( ( \text{sum \{} [Q1], [Q2], [Q3], [Q4], [Q5] \} ) - ( \text{min \{} [Q1], [Q2], [Q3], [Q4], [Q5] \} ) ) / 4
   \]

**NOTE:** Don’t forget to go to **Manage Students > Manage Columns > Organize Columns**. For each calculated column, set **Hidden** to **NO** and **Released** to **YES**. This will enable students to see the results of the calculation.

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