Calculated columns

In the Grade Center, you can calculate grades with calculated columns. Calculated columns combine data from multiple columns to attain performance results.

You can include a calculated column when creating another calculated column. For example, if you created a calculated column that weighs quiz grades, you can include the column when creating a final grade column.

For more information, access a calculated column header's menu and select Quick Column Information. For calculated columns, Points Possible includes the phrase (may vary by student) because some students may be exempt from a test or assignment. Some students may not submitted all of the items included in the column's calculation.

You can change a calculated column's settings and change what is included. The calculation updates automatically.

A calculated column with text as the grade display is not included in the column's calculation. For example, if you set a column to display text, such as Satisfactory/Unsatisfactory, you can't use it in grade calculations.

You can't type in a calculated column's cell to edit the calculated grade. No menu appears in these column's individual cells.

By default, the system creates two calculated columns that appear in new courses-total and weighted total.

Create total columns

1. In the Grade Center, access the Create Calculated Column menu and select Total Column.

2. On the Create Total Column page, type a brief name and an optional description. The name becomes the column name in the Grade Center and on students' My Grades pages. If the name is too long to display clearly in the Grade Center, add a shorter name in the Grade Center Name box. Only the first 14-15 characters appear in the column heading in the Grade Center grid.
3. Make a selection in the Primary Display menu. The selection is the grade format shown in the Grade Center and to students in My Grades. If you created custom grading schemas, they appear in the list.

4. Optionally, make a selection in the Secondary Display menu. The default setting is None. In the Grade Center column, the secondary value appears in parentheses. The secondary value doesn't appear to students.

5. If grading periods exist, you can associate the column with a grading period. If no grading periods exist, the menu doesn't appear. You can use grading periods to filter Grade Center data and create calculated columns.

6. In the Select Columns section, select what to include in the column's calculation.

7. Calculate as Running Total: Select Yes to calculate as a running total. Running totals exempt cells that don't contain data. Select No to include all selected columns in the calculation, using a value of 0 if no grade exists. The result can make grades appear artificially low.

8. Select the Options:
   - Include this Column in Grade Center Calculations:
   - Show this Column to Student
   - Show Statistics (average and median) for this Column to Students in My Grades

9. Select Submit.

If you delete a column from the Grade Center that is included in a total calculation, the column is also removed from the calculation.
**Weighted columns**

Create weighted columns

The basics for creating a calculated column are listed in the total column section. This table lists the options that appear after you move a category to the Selected Columns box.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grading Period menu</strong></td>
<td>If you selected a category for the calculation, you can limit the columns used by selecting a particular grading period.</td>
</tr>
<tr>
<td><strong>Weight Columns</strong></td>
<td>Select how to weigh columns within the category.</td>
</tr>
<tr>
<td></td>
<td>- Select Equally to apply equal value to all columns within a category.</td>
</tr>
<tr>
<td></td>
<td>- Select Proportionally to apply the appropriate value to a column based on its points compared to other columns in the category.</td>
</tr>
<tr>
<td><strong>Drop Grades</strong></td>
<td>Removes a number of either the highest or lowest grades for each category from the calculation. If you don't type numbers in the boxes, no grades are dropped.</td>
</tr>
<tr>
<td><strong>Use only the Lowest -</strong></td>
<td>Removes all grades from the calculation except for the best or worst score.</td>
</tr>
</tbody>
</table>
Option | Description
--- | ---
OR- Highest Value to Calculate

Type a percentage for each selection. **The percentages of all columns added together must equal 100 percent.** After you assign the last percentage, click anywhere in the box to update the percentage located below the Selected Columns box in the Total Weight field.

*To delete a selection in the Selected Columns box, select the red X.*

If you delete a column that is included in the calculation for a weighted column, the percentage assigned to the deleted column is removed.

**Equal weighting**

When the columns and categories you select for the weighted column have different point values, Equal weighting converts them to percentages. These percentages are averaged to obtain an equal value for each of the items included in the weighted column. Equal weighting gives each item equal weight when determining the composite grade.

**Proportional Weighting**

Proportional weighting adds the raw scores of the included columns and categories. Then, the system divides the result by the total points possible to obtain a percentage for each item in the weighted column. The resulting percentages retain the proportional weight of each item so that items with a larger point value have more effect on the composite grade.

**Running totals for weighted columns**

You can select Calculate as Running Total for a weighted column. Columns and categories without grades aren’t included in the weighted column’s total that displays in the Grade Center.
The Calculate as Running Total option affects the score displayed for the weighted column in the Grade Center.

Create average columns

The basics for creating a calculated column are listed in the total column section. For Weight Columns, select how to weigh columns within the category:

- Select Equally to apply equal values to all columns within a category.
- Select Proportionally to apply the appropriate value to a column based on its points compared to other columns in the category.

Create minimum/maximum columns

The basics for creating a calculated column are listed in the total column section. In the Select Columns section, select Calculation Type: Minimum or Maximum.

Creating Extra Credit Columns

1. In the Grade Center, select Create Column.
2. On the Create Grade Column page, provide the appropriate information.
3. Select Score from the Primary Display menu.
4. Select Percentage from the Secondary Display menu.
5. For Points Possible, type 0.
6. Select Yes for Include this Column in Grade Center Calculations.
7. Select Submit.