If you delete a column that is included in the calculation for a weighted column, the percentage assigned to the deleted column is removed. In the Selected Columns box, the Total Weight will no longer equal 100%. The calculation does balance itself, but it will not necessarily be based on the percentages you assigned because a column is missing. The system does not update percentages in the Selected Columns box, but the grade that appears in the weighted column in the Grade Center is based on 100%.

To keep a weighted column in view, despite the addition of other columns, move the column and freeze it on the Column Organization page.

Note: You can assign a grade to a maximum of four decimal places, but the Grade Center displays only to a maximum of two decimal places. Grades to three or four decimal places are rounded up. For example, 45.4357 is rounded up to 45.44. Calculated columns also display to a maximum of two decimal places.

About Average Columns

The average column is a type of calculated column that displays the average for a selected number of columns. For example, you can display the average for all tests or display the average grade for each student for a Grading Period.

Simple Average Formula

To find the average of all selected columns, the percentage is calculated to four decimal places. The percentage values for all selected columns are added together. The result is divided by the number of columns included in the calculation. The results display according to the Primary and Secondary Display options.

\[
\frac{(\text{Column 1\%}) + (\text{Column 2\%}) + (\text{Column 3\%}) + (\text{Column 4\%})}{4} = \text{Average percentage score}
\]

Example:

Three values: 8/10, 3/5, 2/2
Percentage equivalents: 80.0000%, 60.0000%, 100.0000%
Total of the values: 240.0000
Number of items: 3
Total value divided by number of columns: 240.0000/3 = 80.00%

Note: You can assign a grade to a maximum of four decimal places, but the Grade Center displays only to a maximum of two decimal places. Grades to three or four decimal places are rounded up. For example, 45.4357 is rounded up to 45.44. Calculated columns also display to a maximum of two decimal places.

How to Create Average Columns

The average column is a type of calculated column that displays the average for a selected number of columns. You can select which columns and categories are used in the calculation for an average column. For example, you can display the average for all assignments. You can change your selections at any time and the calculation updates automatically.

When you create an average column, you can include:

- **All Grade Columns**: Include all individual grade columns in the Grade Center.
- **All Grade Columns in Grading Period**: If grading periods exist, include only the grade columns associated with a grading period.
- **Selected Columns and Categories**: Include specific grade columns and categories (and the associated columns).

Note: Columns with text as the grade display are not included in an average column’s calculation. For example, if you set a grade column to display text, such as Satisfactory/Unsatisfactory, you cannot use it in calculations.

Use the following steps to create an average column.

1. In the Grade Center, point to **Create Calculated Column** on the action bar to access the drop-down list.
2. Select **Average Column**.
3. On the **Create Average Column** page, type a brief, descriptive **Column Name**. This name becomes the column name in the Grade Center and on students’ My Grades pages. If this name is too long to display clearly in the Grade Center, you can type a short, descriptive name in the Grade Center Name box.

   Note: Only the first 14-15 characters typed in either name box appear in the column heading in the Grade Center grid. If you point to the column heading, you can see its full name on the Grade Information Bar.

4. Optionally, type a **Description**. You can use the content editor functions to format the text. Information provided here appears to students when they click the item name in My Grades.
5. Make a selection in the **Primary Display** drop-down list. The selection is the grade format shown in the Grade Center and to students in **My Grades**. The default setting is **Percentage**. If you created any custom grading schemas, they appear in the list. Five default options appear:

   - **Score**: A numeric grade appears in the column.
   - **Letter**: A letter grade appears in the column. The default grading schema is used to assign letter grades. For example, a score of 21/30 equals 70% and appears as a C.
   - **Text**: This default display option does not display text for an average column or allow you to type directly in the column's cell to edit it. If you select **Text**, the numeric score appears in the column. If you want to display text values, you must create a custom text grading schema. Examples of text values include: Excellent, Very Good, Good, Fair, and Poor -OR- Satisfactory and Unsatisfactory. If you choose to share the column results with students in **My Grades**, they will see the text values for their grades.
   - **Percentage**: A percentage appears in the column. For example, a score of 21/30 appears as 70%. If you do not make a selection, the percentage appears in the grid.
   - **Complete/Incomplete**: When a student submits an item, a check mark (✓) appears in the column, regardless of the score achieved.

6. Optionally, make a selection in the **Secondary Display** drop-down list. The default setting is **None**. The same options appear in this drop-down list except for the option chosen as the **Primary Display**. In the Grade Center column, the secondary value appears in parentheses. The secondary value does not appear to students, and you cannot manually edit the secondary value from a column’s cell. **Note**: If you select the default **Text** option, text will not appear. If you want text values to appear, create a customized text grading schema.

7. If grading periods exist, you can associate an average column with a grading period by making a selection in the **Grading Period** drop-down list. If no grading periods exist, the drop-down list does not appear. You can use grading periods to filter Grade Center data and create calculated columns.

8. In the **Select Columns** section, select what to include in the average column's calculation. The following table lists the options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Grade Columns</td>
<td>Include all individual grade columns in the Grade Center.</td>
</tr>
<tr>
<td>All Grade Columns in Grading Period</td>
<td>Select a grading period from the drop-down list to include only those columns associated with the grading period in the calculation. If no grading periods exist, the drop-down list does not appear.</td>
</tr>
<tr>
<td>Selected Columns and Categories</td>
<td>Select grade columns and categories individually. Select the columns in the <strong>Columns to Select</strong> box and click the right-pointing arrow to move the selections to the <strong>Selected Columns</strong> box.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>When you select a column,</td>
<td>you can view information about the column in the <strong>Column Information</strong> area below the <strong>Columns to Select</strong> box.</td>
</tr>
<tr>
<td>Note:</td>
<td>A column that is set to <strong>No</strong> for <strong>Include this Column in Grade Center Calculations</strong> does not appear in the selection list.</td>
</tr>
<tr>
<td>Tip:</td>
<td>For Windows, to select multiple items in a list, press the SHIFT key and click the first and last items. To select items out of sequence, press the CTRL key and click each item needed. For Macs, press the COMMAND key instead of the CTRL key.</td>
</tr>
<tr>
<td></td>
<td>Select the categories in the <strong>Categories to Select</strong> box and click the right-pointing arrow to move the selections to the <strong>Selected Columns</strong> box. When you select a category, you can view which columns are included in the category in the <strong>Category Information</strong> area below the <strong>Categories to Select</strong> box. Other options appear after you move the category to the <strong>Selected Columns</strong> box:</td>
</tr>
<tr>
<td></td>
<td>◦ If grading periods exist, make a selection in the <strong>Grading Period</strong> drop-down list. If no grading periods exist, the drop-down list does not appear. If you selected a category for the calculation, you can limit the columns used by selecting a particular grading period</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Weight Columns</strong> allows you to select how to weigh columns within the category.</td>
</tr>
<tr>
<td></td>
<td>• Select <strong>Equally</strong> to apply equal values to all columns within a category.</td>
</tr>
<tr>
<td></td>
<td>• Select <strong>Proportionally</strong> to apply the appropriate value to a column based on its points compared to other columns in the category.</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Drop Grades</strong> removes a number of either the highest or lowest grades for each category from the calculation. If you do not type numbers in the boxes, no grades are dropped.</td>
</tr>
<tr>
<td></td>
<td>◦ <strong>Use only the Lowest</strong> -OR- <strong>Highest Value to Calculate</strong> removes all grades from the calculation except for the best or worst score.</td>
</tr>
</tbody>
</table>

*Note:* To delete a selection in the **Selected Columns** box, click the red **X**.

9. **Calculate as Running Total**: Select **Yes** to calculate as a running total. Running totals exempt cells that do not contain data. Select **No** to include all selected columns in the calculation, using a value of 0 if no grade exists. This can make grades appear artificially low.
10. Select the Options.
   - **Include this Column in Grade Center Calculations**: Select Yes to make the column available for potential inclusion when creating calculated columns.
   - **Show this Column to Students**: Select Yes to display the column to students on their My Grades pages.
   - **Show Statistics (average and median) for this Column to Students in My Grades**: Select Yes to include statistical information with the grade value when shown to students.

11. Click Submit.

The new average column appears last in the Grade Center grid unless you associated it with a grading period. All grading period columns appear together in the grid until you reorder them.

You can change the column's settings at any time and change which columns are included. Once edited, the calculation updates automatically.

You are not allowed to type directly in an average column's cell to edit the calculated grade. Therefore, no contextual menu appears when you move your mouse pointer over an individual cell in an average column.
To keep an average column in view, despite the addition of other columns, move the column and freeze it on the **Column Organization** page.

**Note:** You can assign a grade to a maximum of four decimal places, but the Grade Center displays only to a maximum of two decimal places. Grades to three or four decimal places are rounded up. For example, 45.4357 is rounded up to 45.44. Calculated columns also display to a maximum of two decimal places.

### About Minimum/Maximum Columns

The minimum/maximum column is a type of calculated column that displays either the minimum or maximum grade for a selection of columns. For example, you can find the minimum score on all tests, but only show it in the Grade Center grid and not to your students on their **My Grades** pages.

**Minimum/Maximum Formula**

**Minimum:** The percentage value for each column included in the calculation is compared up to four decimal places and the lowest value is displayed. The result displays up to two decimal places.

**Maximum:** The percentage value for each column included in the calculation is compared up to four decimal places and the highest value is displayed. The result displays up to two decimal places.

**Example:**

Three values: 8/10, 3/5, 2/2

Percentage equivalents: 80.0000%, 60.0000%, 100.0000%

Minimum: 60.00%

Maximum: 100.00%

**Note:** If two values are exactly the same for a minimum/maximum column, that is the value that appears in the Grade Center grid.