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.
How to Create 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. You can select which columns and categories are used for displaying a minimum or maximum value. For example, you can display the minimum score for a grading period to help you determine what content your students may be struggling with. You can change your selections at any time and the calculation updates automatically.

When you create a minimum/maximum 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 a minimum/maximum 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 a minimum/maximum column.

1. In the Grade Center, point to **Create Calculated Column** on the action bar to access the drop-down list.
2. Select **Minimum/Maximum Column**.
3. On the **Create Minimum/Maximum Column** page, type a brief, descriptive **Column Name**. This name becomes the column name in the Grade Center and on students’ **My Grades** pages unless you provide a different name in the **Grade Center Display Name** box. 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 on their **My Grades** pages. 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 a minimum/maximum 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.

<table>
<thead>
<tr>
<th>Primary Display</th>
<th>Secondary Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Score</td>
</tr>
<tr>
<td>Letter</td>
<td>Text</td>
</tr>
<tr>
<td>Percentage</td>
<td>Complete/Incomplete</td>
</tr>
</tbody>
</table>

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 custom text grading schema.

7. If grading periods exist, you can associate the minimum/maximum 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 **Calculation Type**: **Minimum** or **Maximum**.

9. Select what to include in the minimum/maximum 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.</td>
</tr>
<tr>
<td></td>
<td>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. When you select a column, you can view information about the column in the <strong>Column Information</strong> area below the <strong>Columns to Select</strong> box.</td>
</tr>
</tbody>
</table>

*Note:* A column that is set to **No** for Include this Column in Grade Center Calculations does not appear in the selection list.

*Tip:* 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.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<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>
<td></td>
</tr>
<tr>
<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>
<td></td>
</tr>
</tbody>
</table>

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

10. **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.

11. 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 in **My Grades**.
   ◦ **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.

12. Click **Submit**.
The new minimum/maximum 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 a minimum/maximum column's cell to edit the calculated grade. Therefore, no contextual menu appears when you move your mouse pointer over an individual cell in a minimum/maximum column.

To keep a minimum/maximum 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.

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### Understanding the External Grade Column

The results in the external grade column are shared with your school as your students’ grades for your course. You decide which column is set as the external grade. In new courses, the default total column is the default external grade column, and the external grade icon ( ) appears in the column header. You cannot delete the default total column until you set another column as the external grade.

Access the contextual menu in the column header for the column you want to set as the external grade column and select **Set as External Grade.** The check mark appears in the column header you chose and no check mark appears in the default total column header.

If you copy or restore a course, the external grade column you chose remains as the external grade column.