

# GPA Calculation

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## Tool Search: GPA Calculation

Campus automatically calculates students' cumulative GPAs in student transcripts based on the course-defined GPA Weight of courses in which the student received credit. This GPA Calculations tool can be used to create custom GPA calculations, which only consider students' performance in the selected courses. These calculations can be used, for example, to calculate a student's math and science GPA for applying to an engineering school. Custom GPA Calculations are not a requisite part of setting up Grading and Standards information. These custom GPAs are used in special situations or as needed.

Two options exist:

1. **Custom Stored Procedure.** This requires database access and understanding of the Campus database.
2. **Custom Course Weighting.** This option modifies the GPA Weight entered at the Course level to follow the custom Weight entered here. It does not require database access.

A district can add as many custom calculations as necessary. A school must decide whether to use the standard calculation available in Campus or use an available custom GPA calculation. That chosen custom calculation must be associated with the appropriate [school calendar](#) before the GPA calculation is applied to student GPAs. **If it is determined that a more advanced GPA calculation is needed for your district, districts with database access can create a stored procedure. Otherwise, the Campus Custom Development team can create stored procedures.**

For detailed information on GPAs, GPA Calculations, GPA Weights, etc., see the [GPA Calculations in Campus](#) article.

GPA calculations can be marked as inactive when they are no longer being used. GPA Calculations can also be rolled forward when rolling calendars forward. Inactive calculations can be added to calendars, but they do not roll forward to new calendars.

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GPA Calculation
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GPA Calculation Editor
Name
AP Calculation
Weighted Calc with Bonus Points
Unweighted Calc with Bonus Points
Bonus Points
Weighted Calc
Unweighted Calc
Standard Calc

GPA Calculation Detail
Name
Unweighted Calc with Bonus Points
Inactive
Sequence
0
Calculation Type
Unweighted GPA
Calculation Method
Use Custom Stored Procedure: Name get\_customGPA\_cjg\_test
Use Custom Course Weighting
Description

Procedure fields naming convention
Name
Required
Description
personID
Required
Student personal identification
gpaWeight
Required
Total GPA weight
out\_of
Required
Total number of students in corresponding grade level
cumGPA
Optional
Cumulative GPA calculated by normal(weighted) GPA value
rank
Optional
Class Rank By normal Cumulative GPA
cumGPAUnweighted
Optional
Unweighted Cumulative GPA calculated by unweighted GPA value
rankUnweighted
Optional
Class Rank By unweighted Cumulative GPA
cumGPABonus
Optional
Cumulative GPA calculated by normal(weighted) GPA value + Bonus Point
rankBonus
Optional
Class Rank By normal Cumulative GPA + Bonus Point
cumGPAUnweightedBonus
Optional
Unweighted Cumulative GPA calculated by unweighted GPA value + Bonus Point
rankUnweightedBonus
Optional
Class Rank By unweighted Cumulative GPA + Bonus Point
student
Optional
Student's name
studentNumber
Optional
Student's student Number
grade
Optional
Student's grade level
Course Weight Detail

GPA Calculation Editor

Custom GPA calculations display in the following areas:

- [Student Grades](#)
- [Student Credit Summary](#)
- [Transcript Report Preferences](#)
- Printing student transcripts using [Transcript Batch](#) or the print option from [Student Transcripts](#)
- [Cumulative Label Report](#)
- [Class Rank Report](#)
- [Graduation Programs and Academic Programs](#)

## GPA Calculation Detail

The following fields are available when creating custom GPAs.

Field	Description
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Field	Description
<b>Name</b>	<p>Indicates the name of the GPA calculation. This name is what displays in the list of available calculations, so it should be clear and descriptive.</p> <p>The name can be up to 50 characters in length.</p>
<b>Inactive</b>	When marked, indicates the GPA calculation is outdated. Inactive calculations cannot be assigned to calendars or rolled forward into future calendars.
<b>Sequence</b>	Entered value is used to sort GPAs. There could be several custom calculations assigned for a calendar; a calculation with a sequence of 1 displays before a calculation with a sequence of 5.
<b>Calculation Type</b>	<p>Selection indicates the type of calculation that will be done. Options are:</p> <ul style="list-style-type: none"> <li>Weighted GPA</li> <li>Unweighted GPA</li> <li>Weighted GPA with Bonus Points</li> <li>Unweighted GPA with Bonus Points</li> </ul> <p>For information on these options, see the <a href="#">GPA Calculations in Campus</a> article.</p>
<b>Calculation Method</b>	<p>Selection determines whether the GPA is calculated using a stored procedure or if courses are manually weighted.</p> <ul style="list-style-type: none"> <li><b>Use Custom Stored Procedure</b> - This option requires the stored procedures be available in the database prior to populating this screen and is created by our Custom Development team. When chosen, the read-only <b>Procedure fields naming convention editor</b> opens and the Custom Course Weighting editor is blank.</li> <li><b>Use Custom Course Weighting</b> - This option allows specific courses to be weighted differently. When chosen, the <b>Course Weight Detail</b> editor opens. This is an override to the GPA Weight entered on the Course editor. When chosen, the <b>Course Weight Detail</b> editor opens and the Procedure Fields Naming Convention editor is blank.</li> </ul>
<b>Name</b>	Lists the name of the Custom Stored Procedure when using the Calculation Method of Use Custom Stored Procedure. The stored procedure must be created first
<b>Description</b>	Use this field to provide more information on the GPA Calculation. This does not display on reports, but more information on the procedure used or when it was created could be helpful.

## Custom Stored Procedure

The following information relates to the Use Custom Stored Procedure option.

# Procedure Fields Naming Convention

Note that there are certain fields that **MUST** be included in a stored procedure for GPA and certain fields that may be included in a stored procedure for GPA. These are listed in the **Procedure Fields Naming Convention** editor.

The followings fields are required when creating a GPA stored procedure:

- personID
- gpaWeight (total GPA Weight)
- out\_of (total number of students in corresponding grade level with whom the student is ranked)

The following fields are optional when creating a GPA stored procedure:

- cumGPA
- rank
- cumGPAUnweighted
- rankUnweighted
- cumGPABonus
- rankBonus
- cumGPAUnweightedBonus
- rankUweightedBonus
- student
- studentNumber
- grade

## Stored Procedure Details

All custom GPA stored procedures need to have the same parameters as the *get\_gpa\_stats\_all* stored procedure..

Create a stored procedure that includes these parameters:

- @personID INT = NULL,
- @calendarID INT = NULL,
- @grade VARCHAR(4) = NULL,
- @sort INT = NULL,
- @endYear INT = NULL,
- @excludeOverride bit=0

The stored procedure may contain other parameters, but the other parameters are not be used by the custom GPA process. If other parameters are included in the stored procedure, include logic that provides default values for the extra parameters.

When reports using the custom GPA process run, the report always provides a value for @calendarID. @personID or @grade may be null, depending on whether a report runs for all students in a grade level, for students in multiple grade levels, or for a single student. The stored procedure should include logic to handle all of these options.

The stored procedure must return values from at least one of the sets of values below (exact matches, case sensitive) which should match the Calculation Type selected when the GPA Calculation Detail is saved:

Sets	Values
Set 1	CumGPA rank
Set 2	cumGPAUnweighted rankUnweighted
Set 3	cumGPABonus rankBonus
Set 4	cumGPAUnweightedBonus rankUnweightedBonus

The stored procedure may also return grade and bonusPoints.

The stored procedure may return more values than those listed above, but these values are not currently available in the Campus core reports that use custom GPAs.

If modifying the fields of an existing GPA calculation, be aware that changing the calculation method from a stored procedure to a custom course weighting option removes the stored procedure from the editor. The procedure will not be removed from the database. It might be a good practice to note the name of the stored procedure in the Description field just in case.

## Create a Custom GPA using a Stored Procedure

1. Click **New** in the action bar.
2. Enter a **Name** for the custom GPA. This name will appear on transcripts and reports.
3. Mark the **Inactive** checkbox as appropriate, e.g., when this stored procedure is no longer used or is not ready to be used.
4. Enter the appropriate **Sequence** value.
5. Select the desired **Calculation Type**.
6. Select the **Use Custom Stored Procedure** radio button for the **Calculation Method**.
7. Enter the **Name** of the stored Procedure.
8. Enter a **Description** of the calculation.
9. Click **Save** when finished. The GPA Calculation is saved and is listed in the GPA Calculation Editor. Next, assign the [calculation to a calendar](#).

Save
+ New
✕ Delete

**GPA Calculation Editor**  

Name  
2019-20 Semester-1 GPA  
2019-20 Semester-2 GPA  
Accounting and Finance  
Administrative Services  
Aerospace Engineering  
Agricultural Leadership, Communication and Policy  
Agricultural Mechanics Technology  
Animation

**GPA Calculation Detail**  

Name  
2019-20 Semester-1 GPA

Sequence  
0

\*Calculation Type  
Weighted GPA

Calculation Method  
☒ Use Custom Stored Procedure: Name st\_Semester1\_GPA  
☐ Use Custom Course Weighting

Description

Inactive  
☐

+ Procedure fields naming convention

Name	Required	Description
personID	Required	Student personal identification
gpaWeight	Required	Total GPA weight
out_of	Required	Total number of students in corresponding grade level

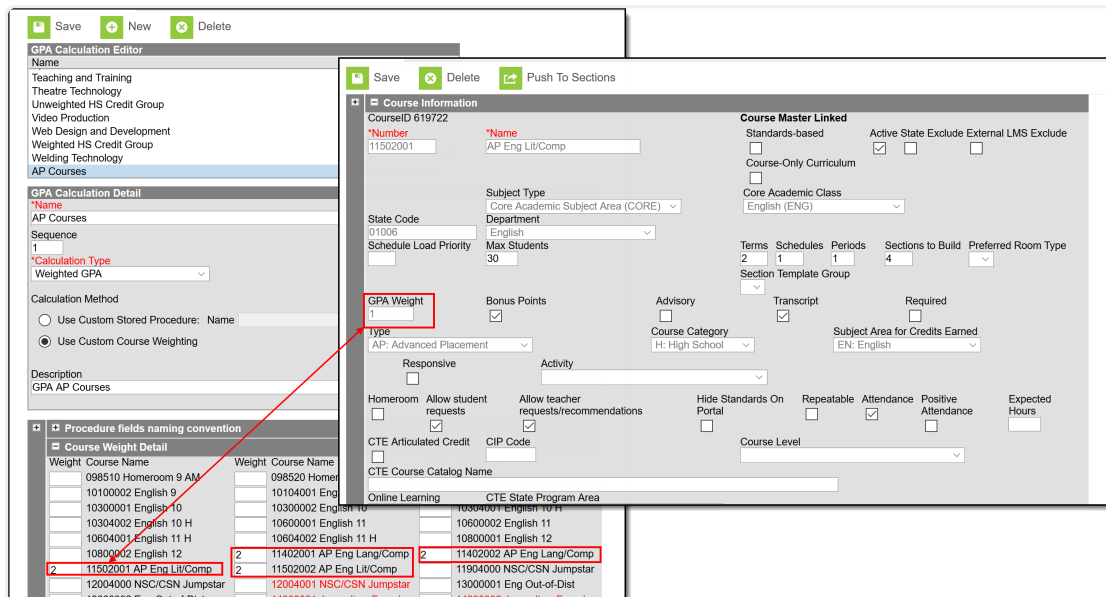
*Custom Stored Procedure for Custom GPA*

## Custom Course Weighting

Custom Course Weighting is an override to GPA Weight entered on the Course editor. For example, Advanced Placement courses may be assigned a weight of 2, rather than 1, as part of the custom GPA calculation. Or, perhaps all courses are weighted the same on the Course level, but this custom calculation gives each course a different weight.

This option is helpful when a district may not comfortable creating stored procedures, does not want to work directly in the Campus database, or has a limitation on contacting Custom Development for specific needs.

On the GPA Calculation Editor, notice that the **Weight** value for the AP Eng Lang/Comp courses has a value of 2. In the image below, notice that the **GPA Weight** on the Course Editor or Transcript Record has an entered value of 1. When this GPA calculation is used, and the student receives an A (equals a GPA Value of 4.0), the GPA counts that A GPA Value as an 8 (4.0 GPA value x 2 GPA weight).



Weight on GPA Calculation, GPA Weight on Course

## Create a Custom GPA using Custom Course Weighting

1. Click **New** in the action bar.
2. Enter a **Name** for the custom GPA. This name displays on transcripts and reports.
3. Mark the **Inactive** checkbox as appropriate, e.g., when this calculation is no longer used or is not ready to be used.
4. Enter the appropriate **Sequence** value.
5. Select the desired **Calculation Type**.
6. Select the **Use Custom Course Weighting** radio button for the **Calculation Method**.
7. Enter a **Description** of the calculation.
8. For each course to be included in the Custom GPA, enter the **Weight** that the course should have. Note that NULL values count the same as a zero (0) GPA weight.
9. Click **Save** when finished. The GPA Calculation has been saved and is listed in the GPA Calculation Editor. Next, assign the [calculation to a calendar](#).