

## Unit Topic: Pass/Fail Gradebooks

### *Introduction*

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For those courses that require it, it is possible to create a Gradebook that reports student achievement as a “Pass” or “Fail” (P or F).

As the conditions for success in a course are often unique *to* the course (and hopefully well described in the Evaluation Criteria Notes of the course outline) it is not possible to document all possible permutations of a Pass/Fail gradebook. This document will present three approaches for doing so. One of “simple”, one of “medium”, and one of “complex” difficulty. The methods presented are not exhaustive.

This document is a companion resource. It presumes an understanding of how to access the Grades, create and manage Grade Items, and how to access and manage the Grades Settings. For a comprehensive explanation of the Grades, please see The Grades Tool resource found on the CTL website.

If you have any questions, please reach out to CTL staff at [dcconnect@durhamcollege.ca](mailto:dcconnect@durhamcollege.ca).

### *Content*

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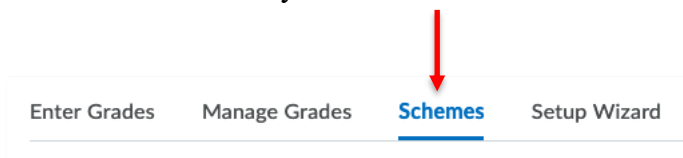
## The Simple

In the simplest method the gradebook Default Grade Scheme is changed to P/F – 100 Pass, and the Grading System is changed from Weighted to Points.

### Method

#### Schemes

Access the Grades of your course and click the **Schemes** tab.



Scheme Name	Default Scheme	Set As Default
Organization Schemes		
Percentage ?		✓
P/F - 100 Pass		✓

Click on the checkmark in the **Set As Default** column for **P/F – 100 Pass**.

Click the **Yes** button in the subsequent confirmation pop up.

Scheme Name	Default Scheme	Set As Default
Organization Schemes		
Percentage ?		✓
P/F - 100 Pass	✓	

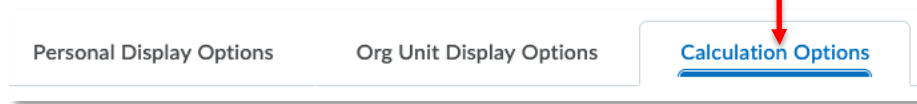
A checkmark should now appear in the Default Scheme column indicating that this is now the default for all Grade Items.

#### Grading System

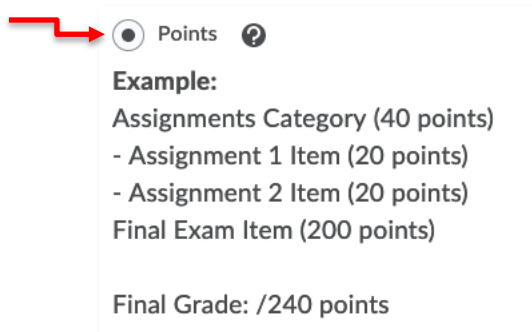
Click on the **Settings** link found on the right side of the page in your Grades.



Next, click on the **Calculation Options** tab.



Click the **Points** radio button under the Grading System title.



Click the **Save** button, then the **Yes** button in the subsequent confirmation pop up.

Navigate back to your **Grades** and create **Grade Items** with a **Maximum Points** value of **1**.

If you are collecting student work using the Assignments tool, you must use the Numeric Grade Item Type. If not, you can use the Pass/Fail Grade Item Type to simplify your assessment steps.

## Result

Each grade item will display a pass (P) as a record of achievement when a student is assigned the maximum points for that assessment. Furthermore, the Final Calculated Grade will only display as a pass (P) if a student has achieved maximum points on *all* grade items.

## Application Example

This method is often used for field placement type courses where a successful result is based on the submission of *all* proper documentation. It is also used for courses where there is a single assessment item.

## The Medium

In the medium method, which is (actually) not much more difficult than the simplest, the gradebook is a Weighted system, and the Final Calculated Grade scheme is changed from the default to the appropriate P/F threshold.

### Method

In this example the course outline Course GPA Weighting field indicates the course is Pass/Fail.

**Course Hours:** 42

**Course GPA Weighting:** Pass/Fail

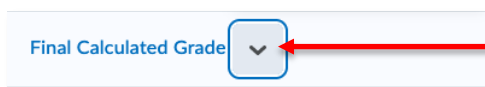
Furthermore, the Evaluation Criteria list of items indicates that each criterion contributes a specific weight to the overall grade.

### Evaluation Criteria:

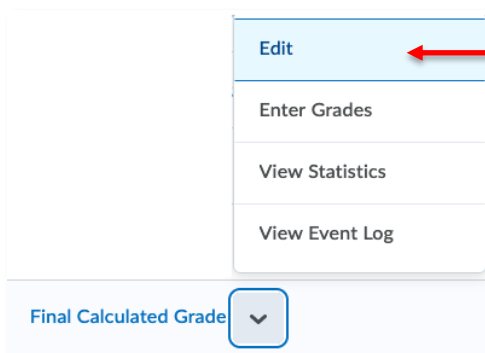
The Course Learning Outcomes and Essential Employability Skills Outcomes are evaluated by the following evaluation criterion.

Evaluation Description	Course Learning Outcomes	EESOs	Weighting
Quiz: ERG Quiz	CLO4	EES6, EES7	10

Build your gradebook according to the Evaluation Criteria set out in your course outline. Be sure to leave the default grade scheme as Percentage – DC Standard.



Next, click the action menu for the Final Calculated Grade item...



...and select the **Edit** option.

Under the Grading heading, click on the **Grade Scheme** pulldown menu...

Grade Scheme

-- Default Scheme -- (Percentage - DC Standard) ▾

...and set the **Grade Scheme** to the appropriate P/F threshold...

Grade Scheme

P/F - 70 Pass ▾

...as indicated in the Evaluation Criteria Notes of your course outline.

**Notes:**

1. 70% Overall Minimum Grade Required

## Result

Each grade item will display the points recorded (e.g., 8/10), the value scaled to the Weight of that item (e.g., 4/5), and the resulting Percentage – DC Standard scheme score (e.g., 80) as a record of achievement. However, the Final Calculated Grade will display (and pass to Banner) as a “P” or an “F” depending on whether the Final Calculated Grade resolves to a number equal to or greater (P), or less (F), than the threshold set in its Grade Scheme.

## Application Example

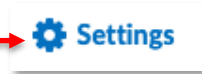
This method is used when it is important that students see their percentage scores on individual evaluation criteria (which are weighted), but the overall resulting grade is a Pass or Fail.

## The Complex

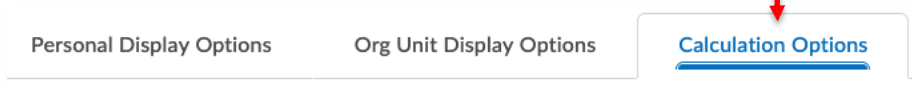
In the complex method the Grading System is changed from Weighted to Formula, and the Scheme for the Final Calculated Grade item is changed to P/F – 100 Pass.

### Method

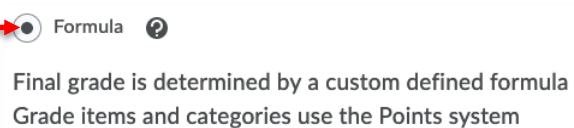
Click on the **Settings** link found on the right side of the page in your Grades.



Next, click on the **Calculation Options** tab.



Click the **Formula** radio button under the Grading System title.



Click the **Save** button, then the **Yes** button in the subsequent confirmation pop up.

Navigate back to your **Grades** and create **Grade Items** according to the Evaluation Criteria describe in your course outline.

It is strongly recommended that you use meaningful (and short) Short Names when creating your Grade Items as this will make them easily identifiable for use when building your formula.

As an example, we are going to use an imagined outline that lists the Evaluation Criteria and their weights as follows:

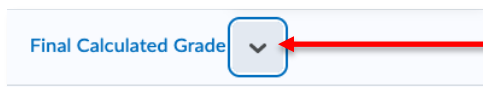
Evaluation Description	Weighting
In Process	10%
Assignment 1	15%
Assignment 2	15%
Test 1	30%
Test 2	30%
Formal Critique	Pass/Fail

Furthermore, in the Notes: we will imagine that it clearly states that to be successful in the course a student must achieve an average of 70% AND pass the Formal Critique.

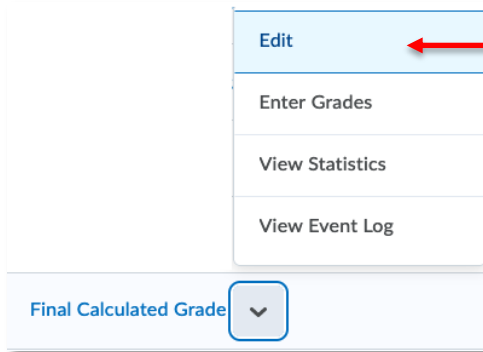
The Grades built according to this imagined outline will look something like this:

In Process ▼	Numeric	-	14
Assignment 1 ▼	Numeric	-	16
Assignment 2 ▼	Numeric	-	16
Test 1 ▼	Numeric	-	32
Test 2 ▼	Numeric	-	50
Formal Critique ▼	Pass/Fail	-	1

It is time to create the formula that will result in a Pass or Fail.



Click the action menu for the Final Calculated Grade item...



...and select the **Edit** option.

Set the **Maximum Points** to “1”

A screenshot of a 'Grading' form. It has a title 'Grading' at the top. Below it is a section 'Maximum Points \*' with a text input field containing the number '1' and a help icon (question mark). Below that is a section 'Points Received' with a text input field containing the text '{No formula defined.}'. At the bottom of the form is a blue link that says '[Edit Using the Formula Editor]'. A red arrow points from the text 'Set the Maximum Points to “1”' to the input field containing '1'. Another red arrow points from the text 'Click the Edit Using the Formula Editor link.' to the blue link.

Click the **Edit Using the Formula Editor** link.



The Formula Editor will pop-up.

The Formula Editor window has a title bar with a close button (X). Inside, there are two buttons at the top: "Validate" and "Preview". Below them is a large text input area containing the text "= I". Under the input area are navigation buttons: "<<", "<", ">", and ">>". To the right of these are buttons for "Grade Item:" (a dropdown menu showing "-- Select a Grade Item --"), "Points Received:" (a dropdown menu showing "Points Received"), and an "Insert" button. Below these are buttons for "Function:" (a dropdown menu showing "-- Select a Function --"), "Start", "Next Term", and "End". On the far right is a numeric keypad with buttons for parentheses, numbers 0-9, and arithmetic operators. It also includes "AND", "OR", "=", "<>", "<", ">", "<=", ">=", "Backspace", and "Clear" buttons.

Using the Formula Editor you will create a logical statement, “If these things are true, the student receives a passing grade. Else, they receive a failing grade”.

Click the **Select a Function** pull-down menu and choose the **If** option. Then click the **Start** button.

This screenshot shows the "Function:" dropdown menu set to "IF". A red arrow points from the text "Click the Select a Function pull-down menu and choose the If option." to the dropdown. Another red arrow points from the text "Then click the Start button." to the "Start" button.

The formula will start and look like this:

The screenshot shows the text input area of the Formula Editor with the text "= IF{".

Next, use the **Select a Grade Item** pull-down menu and choose the first Grade Item to include in your formula. In our example it is easiest to start with the Formal Critique, which uses the Short Name “FC”.



Grade Item: FC Points Received Insert

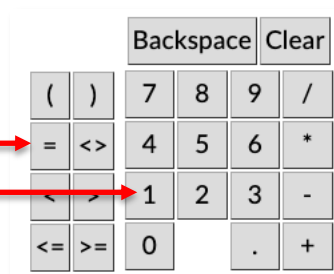
Set the second pull-down menu to **Points Received** and click the **Insert** button.

The formula will now look like this:

= IF( [FC.Points Received]

Click the = button,...

...then the 1 button in the keypad.



		Backspace		Clear	
(	)	7	8	9	/
=	<>	4	5	6	*
<	>	1	2	3	-
<=	>=	0		.	+

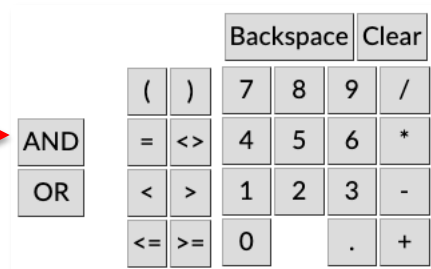
**NOTE:** These buttons in the Formula Editor are finicky and sometimes don't register the click. Be sure to double check your work before moving on.

The formula will now look like this:

= IF( [FC.Points Received] = 1

This is one of the two conditions that must be met to pass the course. The second requires the creation of an equation that incorporates the weights of each assessment item. We also need to connect the two conditions with the “AND” possibility.

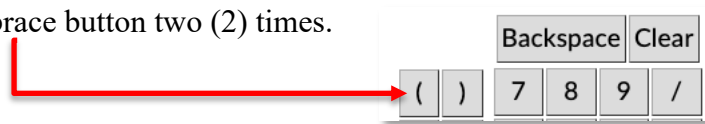
Click the AND button.



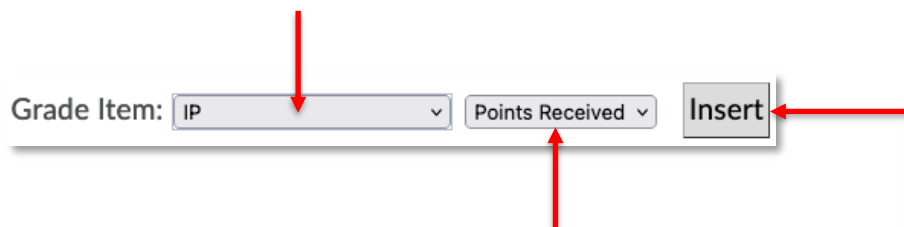
		Backspace		Clear	
(	)	7	8	9	/
=	<>	4	5	6	*
<	>	1	2	3	-
<=	>=	0		.	+
AND					
OR					

It is tedious to describe each step (and there are many) of the equation we are building. Therefore, one portion (the In Process item) will be described in detail, with the understanding that the remainder is a “rinse and repeat” process.

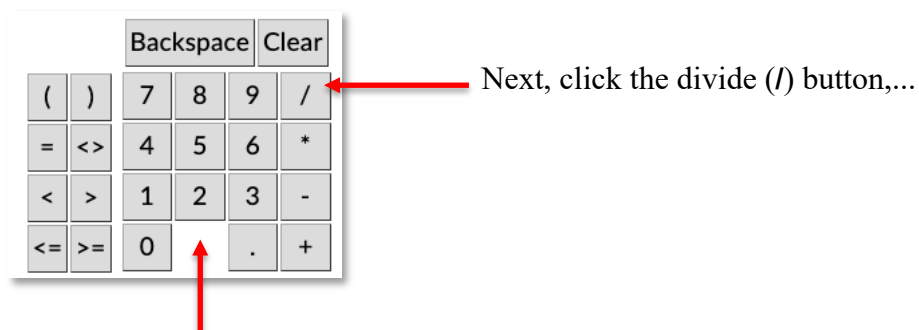
Begin by clicking the left brace button two (2) times.



Select the **IP** option in the Grade Item pull-down,...

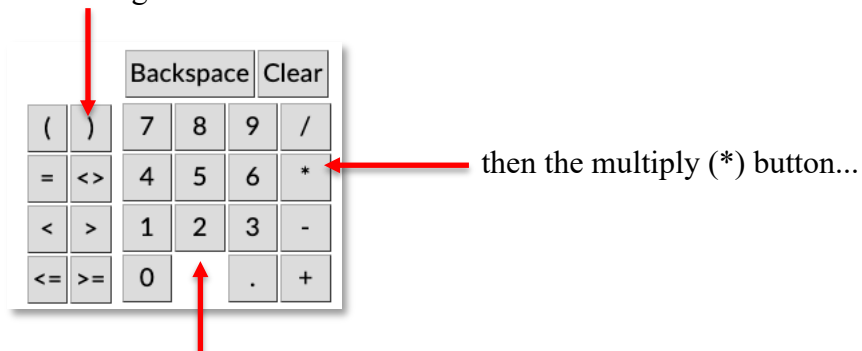


...set the second pull-down menu to **Points Received** and click the **Insert** button.



Then use the keypad buttons to enter the Maximum Points of the Grade Item, in this case “14”.

Click the right brace button...



...and then use the keypad to enter the Weight of the Grade item, in this case “10”.

Click the right brace button again, then the plus (+) button.

The formula will now look like this:

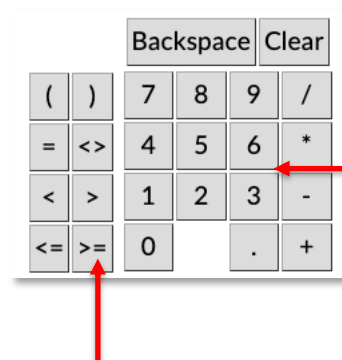
```
= IF{ [IP.Points Received] = 1 AND (([IP.Points Received] / 14) * 10) +
```

At this point only one of the assessment items that contributes to numeric score of achievement has been accounted for. Rinse and repeat the steps, starting with the double left brace, until all your weighted elements are included in the formula.

The formula will then look like this:

```
= IF{ [FC.Points Received] = 1 AND (([IP.Points Received] / 14) * 10) + (([A1.Points Received] / 16) * 15) +  
(([A2.Points Received] / 16) * 15) + (([T1.Points Received] / 32) * 30) + (([T2.Points Received] / 50) * 30)
```

The benchmark for passing is 70%, so we must include that as part of the comparison.



Click the **greater than or equal to** button, then input the benchmark value using the keypad. In this example, and accounting for how rounding is handled by the college, input “69.5”.

This is the end of the comparison component of our logical statement.

Next, we assign an overall score based on the result of the comparisons. If both parts are “yes”, the student needs to receive a “1” (Pass). If not, then the student needs to receive a “0” (Fail).

This is done by typing “1,0” using your computer keyboard.

Function: IF

Start

Next Term

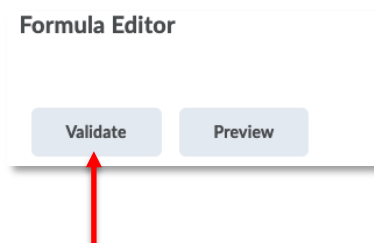
End

Conclude the function by clicking the END button.

The formula will then look like this:

```
= IF{ [FC.Points Received] = 1 AND (([IP.Points Received] / 14) * 10) + (([A1.Points Received] / 16) * 15) +  
([A2.Points Received] / 16) * 15) + (([T1.Points Received] / 32) * 30) + (([T2.Points Received] / 50) * 30) >=  
69.5, 1, 0 }
```

The next step is to Validate your formula to check for logical errors.



Click the **Validate** button above the yellow formula field.

If your formula validates successfully, you can click the **Insert** button (at the bottom of the Formula Editor window) to affix it to the Final Calculated Grade.

Inserting the formula will add *many* brackets to your formula, and it will be hard to keep track of them all. Do not worry about this.

**NOTE:** Any change to Grade Items included in a formula, or the deletion of a Grade item, will invalidate it.

Once your formula is in place, change the Grade Scheme of the Final Calculated Grade to **P/F – 100 Pass**, then click the **Save and Close** button.

## Result

Each grade item will display the points recorded (e.g., 8/10), and the resulting Percentage – DC Standard scheme score (e.g., 80) as a record of achievement. However, the Final Calculated Grade will display (and pass to Banner) as a “P” or an “F” depending on how the Final Calculated Grade formula resolves.

A Grade Formula cannot ignore ungraded items, this method causes the Final Calculated Grade to display as “F” until *all* grade items have been appropriately scored. Due to this behaviour, you might consider hiding the Final Calculated Grade until end of semester.

## Application Example

This method is used when the Evaluation Criteria describe a combination of minimum numerical achievement across a set of weighted assessments *and* the successful demonstration of one or more skills (e.g., a formal critique).

Please note that it is in no way limited to this example. The grading formula is incredibly flexible and can be used for all sorts of logical comparisons.

If you have any questions, please reach out to CTL staff at [deconnect@durhamcollege.ca](mailto:deconnect@durhamcollege.ca).