Count Records in an Excel Database

fx =DCOUNT(Enrollment,"Year",D2:F3)

C	D	E	F	G	H
Function wizard button		College Enrollment			
	Name	Program	Year		
			1		Counting cells that meet set criteria with DCOUNT
		Total:	3		
	Name	Program	Year		
	Walton L.	Drafting	1		
	Wilson R.	Science	2		
	Thompson G.	Business	3		
	Robitaille L.	Nursing	1		
	Peterson M.	Science	2		
	Graham J.	Arts	3		
	Smith F.	Business	1		
	Nash S.	Arts	2		
	Russell W.	Nursing	3		

DCOUNT Function Overview

The DCOUNT function is one of Excel's database functions.
This group of functions is designed to make it easy to summarize information from large tables of data.
They do this by returning specific information based on one or more criteria chosen by the user.

The DCOUNT function can be used to total the values in a column of data that meet the set criteria.

DCOUNT Syntax and Arguments

The syntax for the DCOUNT function is:
= DCOUNT (database, field, criteria)

All database functions have the same three arguments:
Database: (required) Specifies the range of cell references containing the database. The field names must be included in the range.
Field: (required) Indicates which column or field is to be used by the function in its calculations. Enter the argument either by typing the field name in quotes - such as "Radius" - or enter the column number - such as 3.
Criteria: (required) Lists the range of cells containing the conditions specified by the user. The range must include at least one field name from the database and at least one other cell reference indicating the condition to be evaluated by the function.

Example Using Excel's DCOUNT Function - Matching a Single Criterion

This example will use *DCOUNT* to find the total number of students enrolled in the first year of their college program.

Entering the Tutorial Data

Note: The tutorial does not include formatting steps.
1. Download Database Function Workbook file from moodle
2. Click the DCOUNT worksheet tab
3. Leave cell F5 blank - this is where the DCOUNT formula will be located
4. The field names in cells D2 to F2 will be used as part of the function's *Criteria* argument

Selecting the Criteria

To get DCOUNT to only look at data for first year students we enter the number **1** under the *Year* field name in row 3.
1. In cell F3 type the criteria *1*
2. In cell E5 type the heading *Total:* to indicate the information we will be finding with DCOUNT

Naming the Database

Using a named range for large ranges of data such as a database can not only make it easier to enter this argument into the function, but it can also prevent errors caused by selecting the wrong range.
Named ranges are very useful if you use the same range of cells frequently in calculations or when creating charts or graphs.

1. Highlight cells D6 to F15 in the worksheet to select the range
2. Click on the name box above column A in the worksheet
3. Type *Enrollment* into the name box to create the named range
4. Press the **Enter** key on the keyboard to complete the entry

Opening the DCOUNT Dialog Box

A function's dialog box provides an easy method for entering data for each of the function's arguments.
Opening the dialog box for the database group of functions is done by clicking on the function wizard button (fx) located next to the formula bar above the worksheet - see image above.

1. Click on cell F5 - the location where the results of the function will be displayed

2. Click on the *function wizard button (fx)* icon to bring up the *Insert Function* dialog box
3. Type **DCOUNT** in the *Search for a function* window at the top of the dialog box
4. Click on the *GO* button to search for the function
5. The dialog box should find DCOUNT and list it in the *Select a function* window
6. Click OK to open the DCOUNT function dialog box

Completing the Arguments

1. Click on the *Database* line of the dialog box
2. Type the range name *Enrollment* into the line
3. Click on the *Field* line of the dialog box
4. Type the field name *"Year"* into the line - be sure to include the quotation marks
5. Click on the *Criteria* line of the dialog box
6. Highlight cells D2 to F3 in the worksheet to enter the range
7. Click OK to close the DCOUNT function dialog box and complete the function

8. The answer **3** should appear in cell F5 since only three records - those in rows 7, 10, and 13 - show the student as enrolled in the first year of their program
9. When you click on cell F5 the complete function
=DCOUNT(Enrollment, "Year", D2:F3) appears in the formula bar above the worksheet
Note: If we wanted to find the total number of students enrolled, we could use the regular COUNT function, since we do not need to specify criteria to limit what data is used by the function.

Database Function Errors

#Value: Occurs most often when the field names were not included in the database argument. For the example above, be sure that the field names in cells D6:F6 were included in the named range *Enrollment*.