



Excel & PeopleSoft HCM Activity Sheet

Session A/B Overview

Come join us for some practical hands on learning! In this session we will export data from PeopleSoft HCM into Excel and practice applying filters, using a few common functions, and applying conditional formatting to analyze and make the most of PeopleSoft HCM queries.

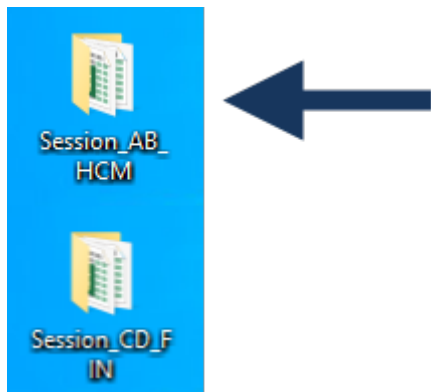
The following Excel functions will be demonstrated in today's sessions:

- Apply Filters
- Date Difference (DAYS)
- If Statement (IF)
- Conditional Formatting
- Concatenate

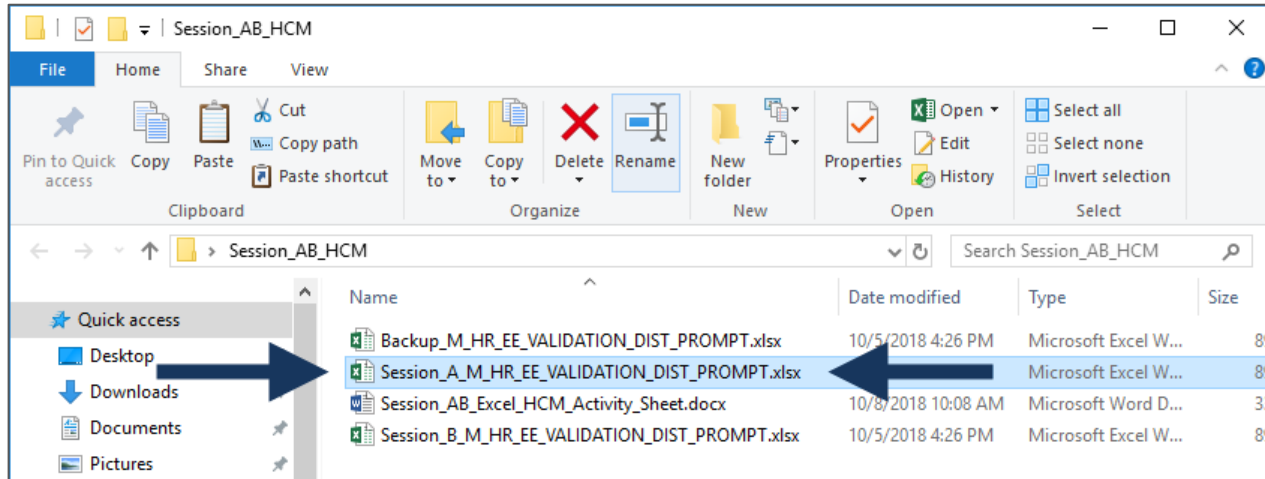
Getting Started

Due to time constraints the HR Employee Validation (**M_HR_EE_VALIDATION_DIST_PROMPT**) query has already been run, downloaded to an Excel workbook and staged for today's Excel & PeopleSoft (HCM) session.

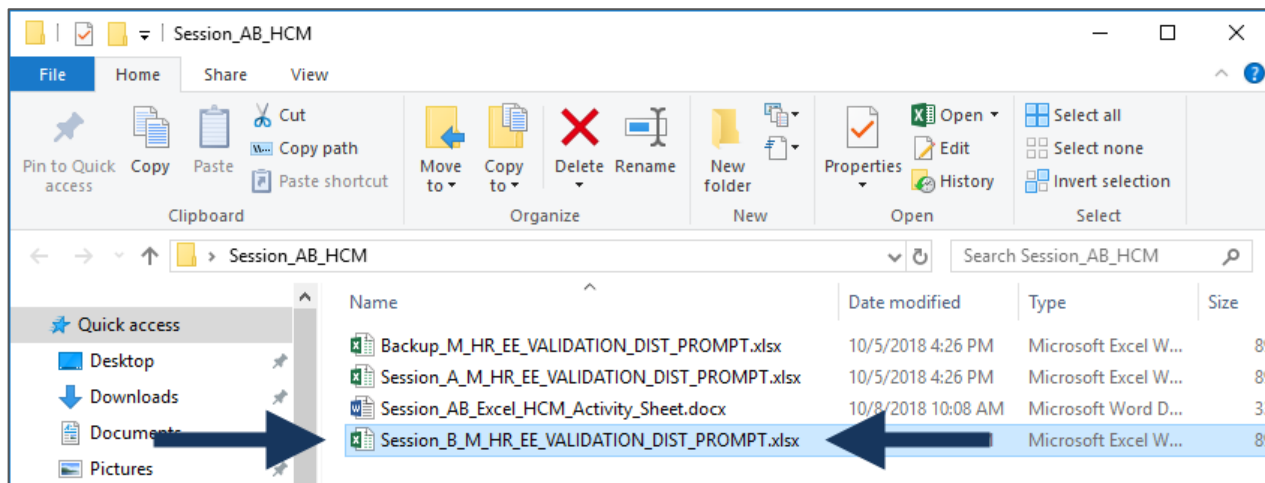
1. Navigate to your laptop's Desktop.
2. Open the **Session_AB_HCM** folder.



3. Open the **appropriate** “*Session*” workbook.
 - a. If you are now attending Session A from 9:00 am to 10:00 am open the **Session_A_M_HR_EE_VALIDATION_DIST_PROMPT** workbook.



- b. If you are now attending Session B from 10:10 am to 11:10 am open the **Session_B_M_HR_EE_VALIDATION_DIST_PROMPT** workbook.



IMPORTANT: Make sure you open the **correct** “*Session*” workbook based on which Session you are attending, either Session A from 9:00 am to 10:00 am, or Session B from 10:10 am to 11:10 am.

Do **not** open or change the “*Backup*” workbook. The “*Backup*” workbook can be used to re-create the “*Session*” workbook in the event the “*Session*” workbook gets corrupted and you have to start over. In that case open the “*Backup*” workbook and use the “*Save As*” option to re-create the “*Session*” workbook. Please see one of the instructors for assistance.



Activity Notes

The HR Employee Validation (**M_HR_EE_VALIDATION_DIST_PROMPT**) query “*Session*” workbook consists of multiple worksheets or tabs:

- **Original_DO_NOT_CHANGE:** This tab contains the original **M_HR_EE_VALIDATION_DIST_PROMPT** query results and should not be changed in any way whatsoever. The “*Original*” tab allows you to start over in the event the Activity tab you are working on gets corrupted. In that case you can navigate to the “*Original*” tab and copy it to another then resume your Activity.
- **Filter:** This tab is used for Activity 1 which covers how to apply filters.
- **Date Difference:** This tab is used for Activity 2 which covers using the DAYS function.
- **IF Statement:** This tab is used for Activity 3 which covers using the IF function.
- **Conditional Formatting:** This tab is used for Activity 4 which covers how to perform conditional formatting.
- **Concatenate:** This tab is used for Activity 5 which covers using the CONCATENATE function.

Each worksheet or tab has the same data set, in other words each tab has the results from the HR Employee Validation (**M_HR_EE_VALIDATION_DIST_PROMPT**) query. However, for the sake of time several columns have been hidden on each of the various tabs. The columns that are not being used in each Activity were hidden to make it easier to view on the screen.

Remember, you can use *Google* or a similar Internet search engine to find more information about any of the available Excel functions. You can also use Excel help to learn more about the different functions.



Activity 1: Apply Filters

Directions: This activity will show you how to apply various filters to the “*Session*” workbook. Filtering data in a workbook means to set conditions so that only certain data is displayed. It is done to make it easier to focus on specific information in a large dataset or table of data. Filtering does not remove or modify data; it merely changes which rows or columns appear in the active Excel worksheet or tab.

Filters work with records or rows of data in the worksheet. The conditions that are set are compared with one or more fields in the record. If the conditions are met, the record is displayed. If the conditions are not met, the record is filtered out so that it isn't displayed with the rest of the data records.

1. Navigate to the **Filter** tab.
2. Enable a filter to display only employees in active pay status (*Column J*).
3. Add a filter to display only FTEs of 1.0 (*Column AB*).
4. Add a filter to display all classified employee types- 3 employee types (*Column R*).
5. Remove the filter to display only employee in active status (*Column I*) but keep the other two filters in place.
6. Search for an employee using their employee id number in the filter box.



Activity 2: Date Difference (DAYS Function)

Directions: This activity will show you how to use the DAYS function to return the number of days between two date values. The DAYS function is a built-in function in Excel that is categorized as a *Date/Time Function*.

The syntax for the DAYS function in Microsoft Excel is:

DAYS(end_date, start_date)

1. Navigate to the **Date Difference** tab.
2. Add filters to the tab.
3. Filter the Pay Status (*Column J*) for terminated employees only.
4. Add a column after the Posn Entry Dt column (*Column O*).
5. Add a header to *Column P* and label it "*Days in Position*".
6. Insert a date formula in *Column P*, for example **=days(H2,O2)**

Note: In this **DAYS** formula example the *end_date* is the value in cell H2 (column H, row 2 of the Job EffDt field) and the *start_date* is the value in cell O2 (column O, row 2 of the Posn Entry Dt field). The DAYS formula will calculate the difference in days between those 2 dates.

When using the **DAYS** function the results may be negative if the *end_date* value is before the *start_date* value. If you always want to return a positive value you can use the **ABS** function with the **DAYS** function. For example, cell H2 has a value of 10/26/2018 and cell O2 has a value of 10/31/2018. The **DAYS** function =days(H2,O2) returns -5. You can use the **ABS** function to have the **DAYS** function return 5 by changing the function to =abs(days(H2,O2)). The **ABS** function returns the absolute value of a number. The syntax is **ABS(number)**.

There are many, many options to calculate time. For example, workdays, workdays with holidays, months, and years. Use *Google* (or similar Internet search engine) or Excel help to learn more about this functionality.

7. In *Column P*, copy down the formula to all filtered rows of tab.

Activity 3: If Statement (IF Function)

Directions: This activity will show you how to use the IF function to return one value if the condition is *True*, or another value if the condition is *False*. The IF function is a built-in function in Excel that is categorized as a *Logical Function*.

The syntax for the IF function in Microsoft Excel is:

IF(condition, value_if_true, [value_if_false])

1. Navigate to the **IF Statement** tab.
2. Label *Column BK* "*Part Time / Full Time*".
3. Use the Insert Function to build an IF statement for these conditions: If an FTE is less than 1.0 label the employee as "*Part Time*". If an FTE is greater or equal to 1.0 label the employee as "*Full Time*".

Note: The *Insert Function* allows you to insert a new cell or column into a worksheet for tab. Select a cell to the right of where you wish to insert the new column. Right-click and select *Insert* from the popup window then click the *Entire Column* option and *OK*. A new column should now be inserted in the workbook.

4. The IF formula is **=if(AB2<1,"Part Time","Full Time")**

Note: In this **IF** formula example the *condition* (the value you want to test) is **AB2<1** which is comparing the value in cell AB2 (column AB, row 2 of the FTE field) to the value of 1. The *value_if_true* is the value returned when the condition evaluates to *True*. The *value_if_false* is the value returned when the condition evaluates to *False*. When the value in cell AB2 (the FTE) is less than 1 the value returned is **Part Time** (*value_if_true*). Otherwise when the value in cell AB2 is equal to or greater than 1 (not less than) the value returned is **Full Time** (*value_if_false*).

5. In *Column BK*, copy down the formula for all lines by double-clicking in the corner of the cell.



Activity 4: Conditional Formatting

Directions: This activity will show you how to use Conditional Formatting. Conditional Formatting is a tool that allows you to apply formats to a cell or range of cells, and have that formatting change depending on the value of the cell or the value of a formula. For example, you can have a cell appear bold only when the value of the cell is greater than 100. You can also use it to easily identify duplicate values.

Note: Activity 4 builds on the results of the IF Statement from Activity 3. The IF Statement tab already has a copy of the completed results from Activity 3's IF Statement exercise.

1. Navigate to the **Conditional Formatting** tab.
2. In *Column BK*, use the results of "Part Time/Full Time" IF statement/formula to color code each type: Full Time is green, and Part Time is yellow.
3. In *Column BK*, copy down the formula for all lines by double-clicking in the corner of the cell.

Note: There are many different customizable rules that can be created using Conditional Formatting. Refer to the Session's other handouts and also search the Internet for additional information.



Activity 5: Concatenate Function

Directions: This activity will show you how to use the CONCATENATE function to join 2 or more strings together. The CONCATENATE function is a built-in function in Excel that is categorized as a *String/Text Function*.

The syntax for the CONCATENATE function in Microsoft Excel is:

CONCATENATE(text1, [text2, ... text_n])

1. Navigate to the **Concatenate** tab.
2. Label *Column BK* "Position / Department".
3. Copy and paste the header formatting from another header cell.
4. In *Column BK*, CONCATENATE the position and department cells using a comma and space to separate them.
5. The CONCATENATE formula is **=CONCATENATE(P2," ",V2)**

Note: In this **CONCATENATE** formula example the *text1*, *text2*, *text3* (the strings or cells you want to join together) are **P2**,” “, **V2**. The first string or cell is P2 (column P, row 2 of the Position Descr field). The second string is a comma followed by a space. Since this second string is not a cell you must enclose the value within quotes. The third string or cell is V2 (column V, row 2 of the Dept Descr field). This

CONCATENATE formula puts a comma and a space between the Position Descr cell's value and the Dept Descr cell's value, all in a new cell. For example, *Teacher, Ocean Vista*. Any value can be used between the strings, such as a slash or dash (=CONCATENATE(P2,"/ ",V2) or =CONCATENATE(P2,"-",V2). There can be up to 255 strings that are joined together, up to a maximum of 8,192 characters.

6. In *Column BK*, copy down the formula for all lines by double-clicking in the corner of the cell.