

# كلية المستقبل الجامعة

قسم هندسة تقنيات  
الأجهزة الطبية



اسم التدريسي : رامي قيس مالك

اسم المادة : تطبيقات حاسوب

عنوان المحاضرة: برنامج الأوفيس اكسل 2010

رقم المحاضرة: 4

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AL-Mustaqbal university college

Class: 1<sup>st</sup>

Subject: Computer Applications

Lecturer: Rami Qays Malik

Lecture :Part-2-4th lec

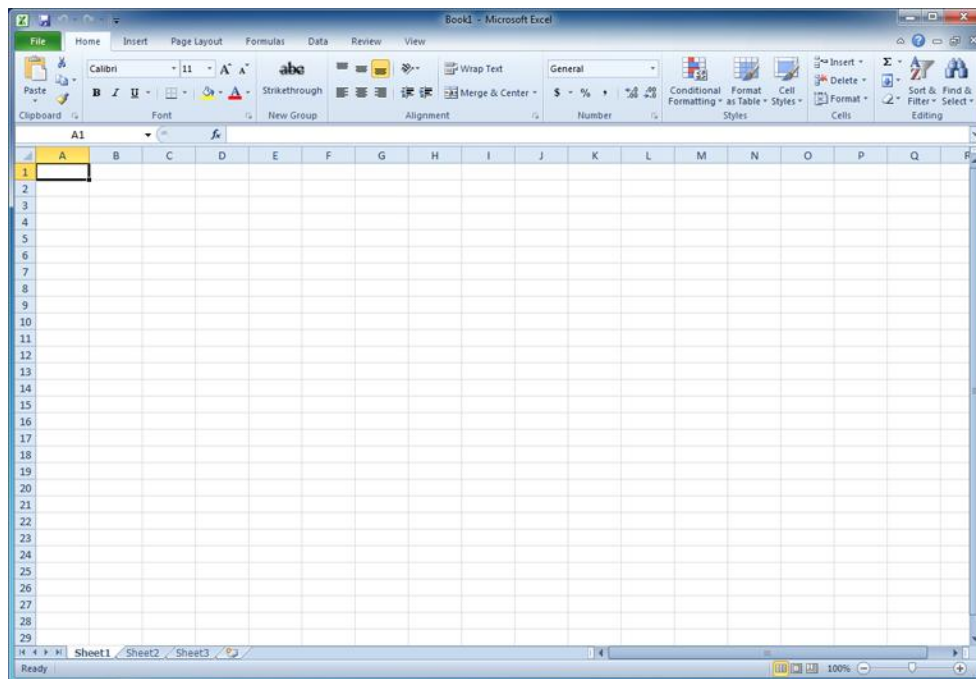
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## MICROSOFT EXCEL 2010

### Introduction:

Excel is a spreadsheet program that allows you to store, organize, and analyze information. The Excel 2010 interface is similar to Excel 2007. There have been some changes we'll review later in this lecture. The excel 2010 interface is shown in the figure below



Excel files are called **workbooks**. Each workbook holds one or more **worksheets** (also known as spreadsheets).

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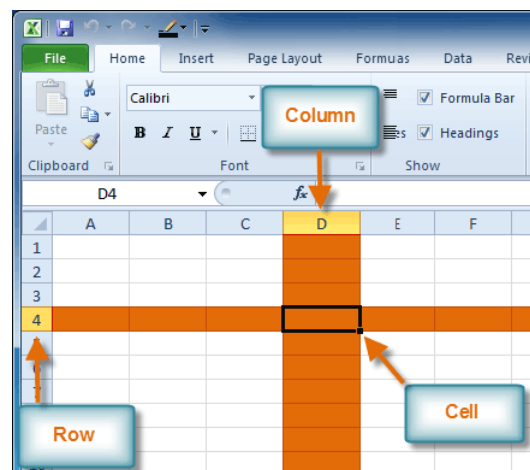


## Introduction to cells and cell content

Cells are the basic building blocks of a worksheet. They can contain a variety of content such as text, formatting attributes, formulas, and functions. To work with cells, you'll need to know how to select them, insert content, and delete cells and cell content.

### The cell

Each rectangle in a worksheet is called a cell. A cell is the intersection of a row and a column.



Each cell has a name, or a cell address based on which column and row it intersects. The cell address of a selected cell appears in the name box.

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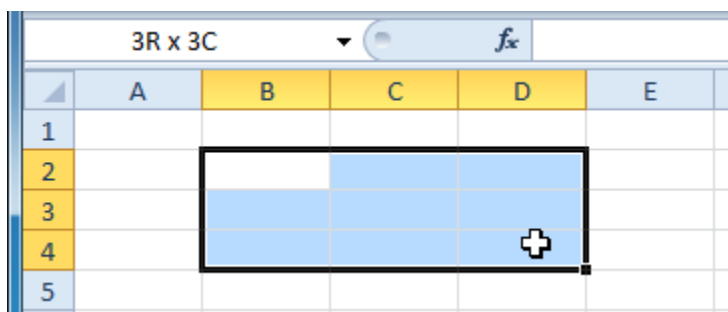
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You can also select **multiple cells** at the same time. A group of cells is known as a **cell range**. Rather than a single cell address, you will refer to a cell range using the cell addresses of the **first** and **last** cells in the cell range, separated by a **colon**. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as **A1:A5**.

### To select multiple cells:

1. **Click and drag your mouse** until all of the adjoining cells you want are highlighted.



2. Release your mouse. The cells will stay selected until you click another cell in the worksheet.

### Cell content

Each cell can contain its own text, formatting, comments, formulas, and functions.

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- **Text**  
Cells can contain letters, numbers, and dates.
- **Formatting attributes**  
Cells can contain formatting attributes that change the way letters, numbers, and dates are displayed. For example, dates can be formatted as MM/DD/YYYY or M/D/YYYY.
- **Comments**  
Cells can contain comments from multiple reviewers.
- **Formulas and functions**  
Cells can contain formulas and functions that calculate cell values. For example, **SUM(cell 1, cell 2...)** is a formula that can add the values in multiple cells.

### To use the fill handle to fill cells:

1. Select the cell or cells containing the content you want to use. You can fill cell content either vertically or horizontally.
2. Position your mouse over the **fill handle** so the **white cross**  becomes a **black cross** .

	A	B	C
1	Office Christmas Party		
2			
3	Employee	Attending	Not Attending
4			
5	Peraza, Brian	X	
6	Swensen, Liz		X
7	Harris, Jane		X
8	Lewty, Alice	X	
9	Olvera, Emily K.		
10	Wodal, Matthew		
11	McMillan, J.E.		
12	Dees, Robert		
13	Wimblet, Grace		
14	Salter, Joe Ann		

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3. Click and drag the fill handle until all of the cells you want to fill are **highlighted**.
4. Release the mouse, and your cells will be filled.

	A	B	C
1	Office Christmas Party		
2			
3	Employee	Attending	Not Attending
4			
5	Peraza, Brian	X	
6	Swensen, Liz		X
7	Harris, Jane		X
8	Lewty, Alice	X	
9	Olvera, Emily K.	X	
10	Wodal, Matthew	X	
11	McMillan, J.E.	X	
12	Dees, Robert		
13	Wimblet, Grace		
14	Salter, Joe Ann		

## Modifying Columns, Rows, and Cells

When you open a new blank workbook, the cells are set to a default size. You have the ability to modify cells, as well as to insert and delete columns, rows, and cells as needed

### To modify column width:

1. Position your mouse over the **column line** in the **column heading** so the **white cross**  becomes a **double arrow** .

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	A	B	C	D	E
1	HPAS North Carolina Board of Directors				
2					
3					

2. Click and drag the column to the right to increase column width or to the left to decrease column width.

	A	B
1	HPAS North Carolina Board of Directors	
2		
3		

3. Release the mouse. The column width will be changed in your spreadsheet.

	A	B
1	HPAS North Carolina Board of Directors	
2		
3		

If you see **pound signs (#####)** in a cell, it means the column is not wide enough to display the cell content. Simply **increase the column width** to show the cell content.

Select **AutoFit Column Width** from the format drop-down menu, and Excel will automatically adjust each selected column so all of the text will fit.

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## Wrapping text and merging cells

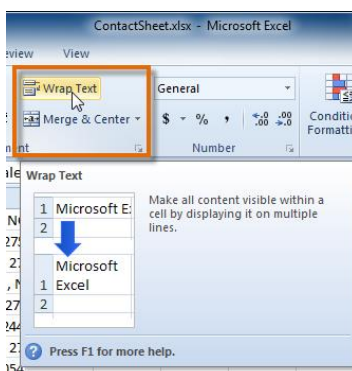
If a cell contains more text than can be displayed, you can choose to wrap the text within the cell or merge the cell with empty adjoining cells. **Wrap text** to make it display on multiple lines of the cell. **Merge cells** to combine adjoining cells into one larger cell.

### To wrap text:

1. Select the cells with text that you want to wrap.

	A	B	C	D	E
1	Ashberry, Jane	78-A Meadowview Lane Raleigh, NC 27589			
2	Davis, Garrett	29 North Luke Court Raleigh, NC 27576			
3	Eberhardt, Elizabeth	63-C Chapel Court Louisberg, NC 27079			
4	Everett, Carol	123 Garden Plow Way Chapel Hill, NC 27051			
5	Hepburn, Katie H.	127 South Pejulup Lane Cary, NC 27057			
6	Lovelace, Deb	124 Heuristic Way Newbern, NC 24484			
7	Manning, Christopher L.	2380 New Cove Road Raleigh, NC 27587			
8	McBride, Rebecca	131 W Clinton Street Cary, NC 27054			
9	Mixon, Daniel	9 Atlantic Boulevard Raleigh, NC 27086			
10	Stevens, Kevin	2520 Hopkins Road Durham, NC 27054			
11					
12					

2. Select the **Wrap Text** command on the **Home** tab.





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3. The text in the selected cells will be wrapped in your worksheet.

	A	B	C	D	E
1	Ashberry, Jane	78-A Meadowview Lane Raleigh, NC 27589			
2	Davis, Garrett	29 North Luke Court Raleigh, NC 27576			
3	Eberhardt, Elizabeth	63-C Chapel Court Louisberg, NC 27079			
4	Everett, Carol	123 Garden Plow Way Chapel Hill, NC 27051			
5	Hepburn, Katie H.	127 South Pejulp Lane Cary, NC 27057			
6	Lovlace, Deb	124 Heuristic Way Newbern, NC 24484			
7	Manning, Christopher L.	2380 New Cove Road Raleigh, NC 27587			
8	McBride, Rebecca	131 W Clinton Street Cary, NC 27054			
9	Mixon, Daniel	9 Atlantic Boulevard Raleigh, NC 27086			
10	Stevens, Kevin	2520 Hopkins Road Durham, NC 27054			
11					
12					

**To merge cells using the Merge & Center command:**

1. Select the cells you want to merge.

	A	B	C	D
1	HPAS North Carolina Board of Directors			
2	Ashberry, Jane	78-A Meadowview Lane Raleigh, NC 27589	919-882-6561	<a href="mailto:ashberryj@hpasnc.org">ashberryj@hpasnc.org</a>
3	Davis, Garrett	29 North Luke Court Raleigh, NC 27576	919-576-4562	<a href="mailto:davisg@hpasnc.org">davisg@hpasnc.org</a>
4	Eberhardt, Elizabeth	63-C Chapel Court Louisberg, NC 27079	252-985-3558	<a href="mailto:eberhardtte@hpasnc.org">eberhardtte@hpasnc.org</a>

2. Select the **Merge & Center** command on the **Home** tab.

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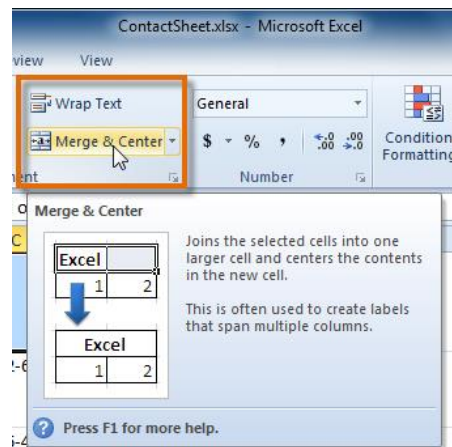
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3. The selected cells will be merged, and the text will be centered.

	A	B	C	D
1	HPAS North Carolina Board of Directors			
2	Ashberry, Jane	78-A Meadowview Lane Raleigh, NC 27589	919-882-6561	<a href="mailto:ashberryj@hpasnc.org">ashberryj@hpasnc.org</a>
3	Davis, Garrett	29 North Luke Court Raleigh, NC 27576	919-576-4562	<a href="mailto:davisg@hpasnc.org">davisg@hpasnc.org</a>
4	Eberhardt, Elizabeth	63-C Chapel Court Louisberg, NC 27079	252-985-3558	<a href="mailto:eberhardtte@hpasnc.org">eberhardtte@hpasnc.org</a>

## Formatting numbers and dates

One of Excel's most useful features is its ability to format numbers and dates in a variety of ways. For example, you might need to format numbers with decimal places, currency symbols (\$), or percent symbols (%).

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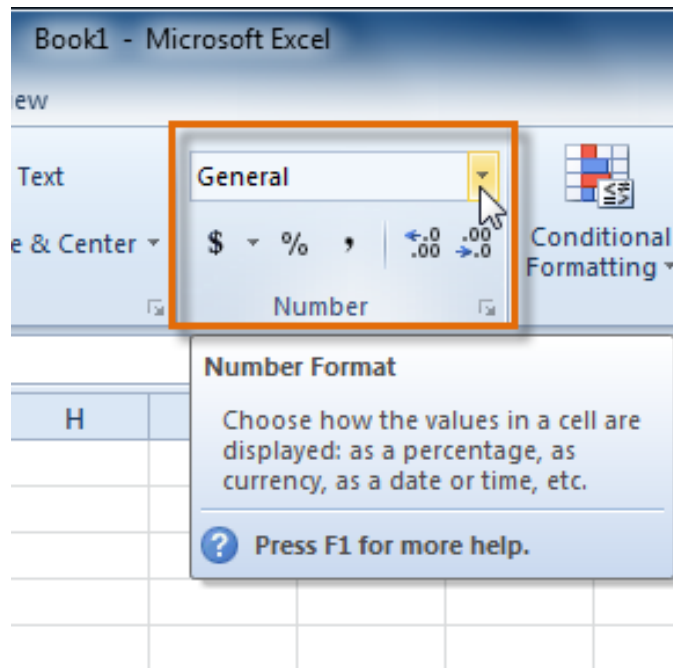
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## To format numbers and dates:

1. Select the cells you want to modify.
2. Click the **drop-down arrow** next to the **Number Format** command on the Home tab.



3. Select the number format you want. For some number formats, you can then use the **Increase Decimal** and **Decrease Decimal** commands (below the Number Format command) to change the number of decimal places that are displayed.

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## Creating Simple Formulas

Excel can be used to calculate numerical information. A **formula** is an equation that performs a calculation. Like a calculator, Excel can execute formulas that add, subtract, multiply, and divide.

Excel uses standard operators for equations, such as a **plus sign** for addition (+), **minus sign** for subtraction (-), **asterisk** for multiplication (\*), **forward slash** for division (/), and **caret (^)** for exponents.

The key thing to remember when writing formulas for Excel is that all formulas must begin with an **equals sign (=)**.

<b>Addition</b>	+	=5+5
<b>Subtraction</b>	-	=5-5
<b>Multiplication</b>	*	=5*5
<b>Division</b>	/	=5/5
<b>Exponents</b>	^	=5^5

## To create a simple formula in Excel:

1. Select the cell where the answer will appear (**B4**, for example).

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	A	B	C
1	Estimated painting cost per square foot		
2	Total cost	\$75.00	
3	Square Feet	250	
4	Total/Sq Ft	+	
5			

2. Type the **equals sign (=)**.
3. Type in the formula you want Excel to calculate (**75/250**, for example).

	A	B	C
1	Estimated painting cost per square foot		
2	Total cost	\$75.00	
3	Square Feet	250	
4	Total/Sq Ft	=75/250	
5			

4. Press **Enter**. The formula will be calculated, and the value will be displayed in the cell.

	A	B	C
1	Estimated painting cost per square foot		
2	Total cost	\$75.00	
3	Square Feet	250	
4	Total/Sq Ft	\$0.30	
5			

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If the result of a formula is too large to be displayed in a cell, it may appear as **pound signs** (#####) instead of a value. This means the column is not wide enough to display the cell content. Simply increase the column width to show the cell content.

## Creating formulas with cell references

When a formula contains a cell address, it is called a **cell reference**. Creating a formula with cell references is useful because you can update data in your worksheet without having to rewrite the values in the formula.

### To create a formula using cell references:

1. Select the cell where the answer will appear (**B3**, for example).

	A	B	C	D
1	Budget for June	\$ 400.00		
2	Budget for July	\$ 300.00		
3	<b>Total Budget</b>			
4				

2. Type the **equals sign** (=).
3. Type the cell address that contains the first number in the equation (**B1**, for example).

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		SUM	X	✓	fx	=B1
	A	B	C	D		
1	Budget for June	\$ 400.00				
2	Budget for July	\$ 300.00				
3	<b>Total Budget</b>	=B1				
4						

4. Type the operator you need for your formula. For example, type the **addition sign (+)**.
5. Type the cell address that contains the second number in the equation (**B2**, for example).

		SUM	X	✓	fx	=B1+B2
	A	B	C	D		
1	Budget for June	\$ 400.00				
2	Budget for July	\$ 300.00				
3	<b>Total Budget</b>	=B1+B2				
4						

6. Press **Enter**. The formula will be calculated, and the value will be displayed in the cell.

		B3	fx	=B1+B2
	A	B	C	D
1	Budget for June	\$ 400.00		
2	Budget for July	\$ 300.00		
3	<b>Total Budget</b>	<b>\$ 700.00</b>		
4				

If you change a value in either B1 or B2, the total will automatically recalculate.

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## To edit a formula:

1. Click the cell you want to edit.
2. Insert the cursor in the **formula bar**, and edit the formula as desired. You can also **double-click the cell to view and edit the formula directly** from the cell.
3. When you're done, press **Enter** or select the **Enter** command .

	D	E	F	G
ling Wish List				
Cost				
		Budget for June	\$ 400.00	
		Budget for July	\$ 300.00	
		Total Budget	=F2+F4	

Edit a formula from the formula bar or cell. To edit from the cell, double-click cell to view formula.

4. The new value will be displayed in the cell.