



Class: First Stage
Subject: computer applications
Lecturer: Dr. Ameer Al-khaykan
ameer.alkhaykan@mustaqbal-college.edu.i



MICROSOFT EXCEL -1-

INTRODUCTION



MAY 2022

Beginning Microsoft Excel 2007

ABOUT THIS CLASS

This class is designed to give a basic introduction into Microsoft Excel 2007. Specifically, throughout the class, we will progress from learning how to open Microsoft Excel to actually creating a document. It is impossible in this amount of time to become totally proficient using Microsoft Excel, but it is our hope that this class will provide a springboard to launch you into this exciting world!

Course Objectives

By the end of this course, you will be able to

- Open Excel and create a new worksheet.
- Format columns and rows.
- Apply basic text formatting.
- Know the difference between deleting and clearing a cell.
- Automatically fill in Labels.
- Merge cells.
- Use ***Autosome***.
- Perform simple mathematical calculations.
- Create simple formulas.
- Print.

This booklet will serve as a guide as we progress through the class, but also can be a valuable tool when you are working on your own. Any class instruction is only as effective as the time and effort you are willing to invest in it. We encourage you to practice between classes. There are computer workshops on Sundays and Wednesdays where you can practice the skills you have learned.

We have also provided several lists of resource materials that can be used for more information or practice at the end of this booklet

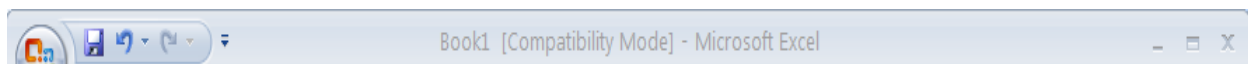
Janice Collins

Technology Supervisor

West Palm Beach Public Library

Excel is a spreadsheet program. A **spreadsheet** is a grid of rows and columns that helps organize, summarize, and calculate data. Spreadsheets are an everyday part of many professions, including accounting, statistical analysis, and project management. You can use Excel to create business forms, such as invoices and purchase orders, among many other useful documents.

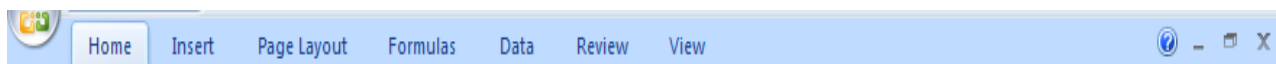
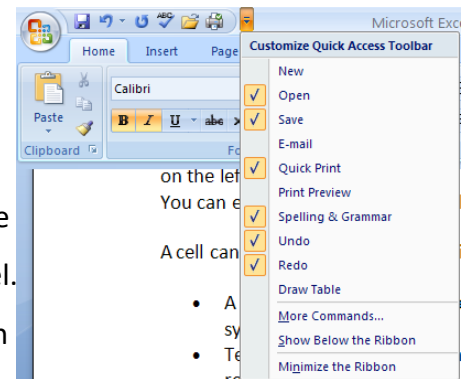
This class teaches Microsoft Excel basics. To begin, let's open Microsoft Excel. You can do this by clicking on **Start, All Programs, and Microsoft Excel**. Let's look at the toolbars.



This is the **Title Bar**. It gives the name of the program and the title of the workbook you are using. Since we have just opened up a new workbook and have not saved it with a name, the default title is Book1.

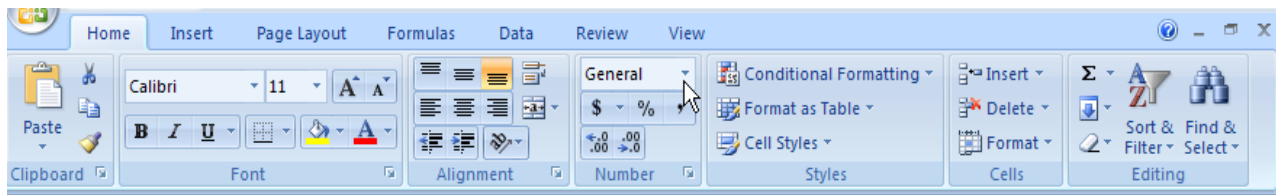


The Office Logo Button is located at the upper left of the **Title Bar**. Clicking on it will open a dropdown menu that contains many of the menu items that used to appear under **File** in prior versions of Excel. Right beside the **Office Button** is the **Quick Access Toolbar**. You can Add or subtract commands to the toolbar by simply clicking/ on them in the list.



Next we have the **Ribbon**. The **Ribbon** has seven **Tabs** that give instructions to the software. The **Ribbon Tabs** begin with **Home** and continue with **Insert, Page Layout, Formulas, Data, Review, and**

View. On the right-hand end, there is an icon for the Help Menu, Minimize, Restore Down, and Close.



Clicking on one of these Tabs will open the **Group**. The **Group** that belongs to each **Tab** shows related Command items together. You may then choose a Command.

Workbooks and Worksheets

When Excel is opened, a workbook appears with three worksheets. Each worksheet contains columns and rows. There are 1,048,575 rows and 16,384 columns. The combination of a column coordinate and a row coordinate make up a cell address. For example, the cell located in the upper left corner of the worksheet is cell A1, meaning column A, row 1. The cell address is visible in the **Name Box**.

Place your cursor in the first cell, A1. The formula bar will display the cell address in the **Name Box** on the left side of the **Formula** bar. Notice that the address changes as you move around the sheet. You can easily move from cell to cell by pressing tab or using the arrow keys.

A cell can contain any of the following:

- A number (and any associated punctuation, such as decimal points, commas, and currency symbols).
- Text (including any combination of letters, numbers, and symbols that aren't number-related).
- A **formula**, which is a math equation.
- A **function**, which is a named equation that shortcuts an otherwise complex operation.

Creating a New Workbook

It is easy to create a new workbook! Simply, click on *Office Button – New* and click on *Blank Workbook* to create a new workbook.

Creating a New Worksheet

Creating a new worksheet is just as easy. By default, each Excel workbook contains three worksheets. Three tabs displaying *Sheet 1*, *Sheet 2*, and *Sheet 3* will be displayed at the bottom of the workbook to indicate the separate sheets. To add a new worksheet, simply click on the tab after the tab that says Sheet 3.

Exercise 1

1. To change the location of a newly added worksheet, click once on the tab and hold down the left mouse button and drag the worksheet to its new location.
2. It is also possible to change the name of each worksheet. Right-click on the *Sheet 1* tab and left-click on *Rename*. Once you click on *Rename*, the name of the sheet becomes highlighted and you can simply type in a new name. Double-clicking on the tab will also enable you to type in a new name.
3. You can also change the color of the tabs by right-clicking on the tab and choosing *Tab Color*. Then simply choose a color!!!
4. It is possible to change the magnification of a worksheet so that you can read it better. To do this, click on *View* and then *Zoom*. Go ahead and try the different magnifications to see which works best for you. You can also make use of the *Zoom* bar in the lower right-hand corner to zoom to a comfortable reading size.

Navigating and Selecting

Moving around a worksheet is easy! You can easily move from cell to cell by using the arrow keys or pressing tab (will move the cursor to the right) or shift-tab (shift-tab will move you to the left). You can also use your mouse to click within a cell which will select that cell. Sometimes you will want to select a **range** of cells.

A **range** is a group of one or more cells. If you select more than one cell at a time, you can then perform actions on the group of them at once, such as applying formatting or clearing the contents. A range can even be an entire worksheet.

A range is referenced by the upper left and lower right cells. For example, the range of cells B1, B2, C1, and C2 would be referred to as B1:C2.

To select a range:

- **With the mouse:** Drag across the desired cells with the left mouse button held down. Be careful when you're positioning the mouse over the first cell (before pressing the mouse button). Position the pointer over the **center** of the cell, and not over an edge.

If you drag while the pointer is on the edge of the cell, Excel interprets the selection as a move operation and whatever is in the cell(s) is dragged to a different spot.

- **With the keyboard:** Select the first cell, and then hold down the **Shift** key while you press the arrow keys to expand the selection area.

To select a nonrectangular or noncontiguous range, select the first portion of the range (that is, the first rectangular piece), and then hold down the **Ctrl** key while you select additional cells/ranges with the mouse.

To select an entire column, click the column header (where the letter is). To select an entire row, click the row header (where the number is). You can click one row or column and then drag to select additional columns, or hold down **Ctrl** as you click on the headers for noncontiguous rows and/or columns.

Exercise 2

Let's practice:

1. Click column B's letter to select that column.
2. **Hold Shift** and click column D's letter. Columns B, C, and D should all be selected.
3. Release the **Shift** key.
4. **Hold Ctrl** and click column G's letter. Now B, C, D, and G are all selected.
5. Release the **Ctrl** key.
6. Click row 2's number. The columns are deselected, and row 2 is now selected.

7. Click in cell **B4**. The row is no longer selected, because you weren't holding down Shift or Ctrl. Now only B4 is selected.
8. Press and hold the **Shift** key while pressing the down arrow key two times. Now B4 through B6 are selected. This range is called B4:B6.
9. Still pressing the **Shift** key, press the right arrow two times. Now the range B4:D6 is selected.
10. Release the Shift key and then press and hold the **Ctrl** key.
11. Drag across cells B9, C9, and D9. Those cells are selected in addition to B4:D6.
12. Release the **Ctrl** key.
13. Press **Ctrl+A**. This is a shortcut for selecting the entire sheet.
14. Click in any cell to undo the selection.
15. Click the square containing a gray triangle at the upper intersection of the column letters and the row numbers. The entire sheet is selected again.

Entering and Editing Data

Let's learn how to enter data into your worksheet. First, you place the cursor in the cell in which you would like to enter data. Then you type the data and press Enter.

Exercise 3

1. Place the cursor in cell A1.
2. Type **Jane**. Tab to the next cell and type **Smith**.
3. Move the cursor back to cell A1.
4. Change "Jane" to "Joe."

You can also edit information in a cell by double-clicking in a cell or by clicking in the formula bar. Try these two options.

Let's practice a little.

Exercise 4

1. Click on the Office button and then on Open.

2. Click on Desktop and then look for Business Trips.xls.
3. Double-click on the file.
4. Edit the text in cell A1 to read Gross Receipts Summary.
5. Change the value in cell D5 to 18.
6. Change the value in cell G12 to 28.
7. Change the value in cell J18 to 25.
8. In cell A19, type # nights @ \$155.
9. In cell A18, change the text to read # nights @ \$95.
10. In cell A17, select the cell and press the Delete key, clearing that cell's contents.
11. In cell K11, type December, and then press Enter.
12. In cell K17, type December, and then press Enter.
13. In cell K18, type 16, and then press Enter.
14. In cell K19, type 2, and then press Enter.
15. Click on the Save button in the Quick Access Bar.

Inserting Columns and Rows

If you don't plan your worksheet layout correctly, you might end up with too many or too few rows or columns in a certain area. You can always move data around in the sheet to help with this, but sometimes it's easier to simply insert or remove columns or rows.

Exercise 5

To insert a column or row:

1. Click on the cell on the right of the two columns between which you wish to insert. To insert rows, click on the lower row of the two between which you wish to insert.
2. Go to “Insert” and select “Columns”. To insert a row, go to “Insert” and select “Rows”.
3. Appearing to the left of your highlighted column or above your highlighted row will be a new row or column. **Insert a row to the left of Column I and a row under Row 1.**

Formatting Columns and Rows


Often you will need to change your columns and rows in order for text to fit or for the text to fit on the page correctly. There are a number of different methods one can use to do this. Let's start with columns.

Column Width: The formatting that is unique to columns is **Column Width**. **Column Width** is measured in characters. A column's width can be from 0 to 255 characters, which is a **really** wide column! Decimal values are allowed. In fact, the default size is 8.43 characters.

A width of 12, for example, means the column is wide enough for 12 average characters, using whatever you chose as the Standard font. The default is Calibri 11 pts. To change the font from the default, go to *Tools-Options-General-Standard font*.

Column Width

Exercise 6 – Autofit all


1. Move your pointer to the right edge of the heading of Column A until it changes to  which is the *Resize Column* shape.
2. Press the left mouse button down. (Don't release it yet.) The popup tip appears, showing the current width of Column A.
3. Release the left mouse button and double-click in the same spot (the right edge of Column A's heading). The column width changes so it is wide enough to display the *longest text* in any cell in the column as a single line.

Be careful when you set a column's width with *AutoFit*. The column may wind up wider than you expected. Any text will be on a *single line* in its cell. No matter how long the text is! If you accidentally find you've widened a cell out of sight to the right, use *Undo*. (my favorite button!) Then resize the column with another method.

Column Width - Drag

Dragging is a natural method of adjusting column width. But since you can't see the change until you release the mouse button, it may take you several attempts to get a satisfactory width.

Exercise 7

1. Type in **New Zealand** in B1. Move the pointer to the right edge of column heading B.
2. When the pointer changes to  (the *Resize Column* shape), drag to the right until **New Zealand** shows entirely. Since the column is not resized until you release the mouse button, you may need several tries to get the width right.
3. Click and hold again on the right edge of Column B to see the new width.

Row Height

The only unique formatting for rows is **Row Height**. **Row Height** is measured in points, like font size, from 0 to 409 points. A row height of zero hides the row.

The default setting for **Row Height** is **AutoFit**. The row height adjusts to the largest font size in the row.

AutoFit will leave a little white space, called the cell padding, between the text in the cell and the cell edges. When Arial 10 pt. is the Standard Font, the **Row Height** is **12.75 points**. You may find that this looks a bit crowded when the gridlines are shown. If you don't print the gridlines, your paper version will look OK.

Moving to a New Worksheet

In Microsoft Excel, each workbook is made up of several worksheets. Before moving to the next topic, let's move to a new worksheet. You can move from worksheet to worksheet by clicking on the tabs at the bottom of the worksheet. Let's move to **Sheet 2**.

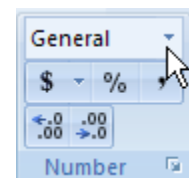
Formatting Text and Data

Once information has been entered into a cell, you might want to change or enhance the way the information is displayed. Text can be formatted in the same way that one uses in Microsoft Word or PowerPoint. Most of the formatting choices can be found in the **Font** grouping under the **Home** tab. There are numerous ways to format data. Let's look at some. First remember to always make sure that the cell you want to format is selected.

Using Formatting Buttons – On the **Ribbon**, make sure the Home tab is selected. In the **Number Group** box, there are several buttons which allow one-click formatting.

Exercise 8

1. Type in the number 214567 in Cells A1, B1, C1, and D1.
2. With the cursor in A1, click on the Currency button.
3. With the cursor in B1, click the Percent button.
4. To add decimal places, click the Increase Decimal button for cell C1.
5. To decrease decimal places, click the Decrease Decimal button for cell D1.



6. Type in 345678 in E1. Click on the Comma button to separate thousands.

Notice how each number changes depending on the formatting.

In addition to the books, here are free online tutorials that can help you with Microsoft Excel.

HP Learning Center: <http://h30187.www3.hp.com/>

Microsoft: <http://office.microsoft.com/en-us/excel/FX100646951033.aspx>

Goodwill Industries: <http://www.gcflearnfree.org/>

Baycon Group: <http://www.baycongroup.com/e10.htm>

Internet4Classrooms: http://www.internet4classrooms.com/on-line_excel.htm