



# Microsoft<sup>®</sup> Excel 2010 Training

## Microsoft Excel 102

Instructor:

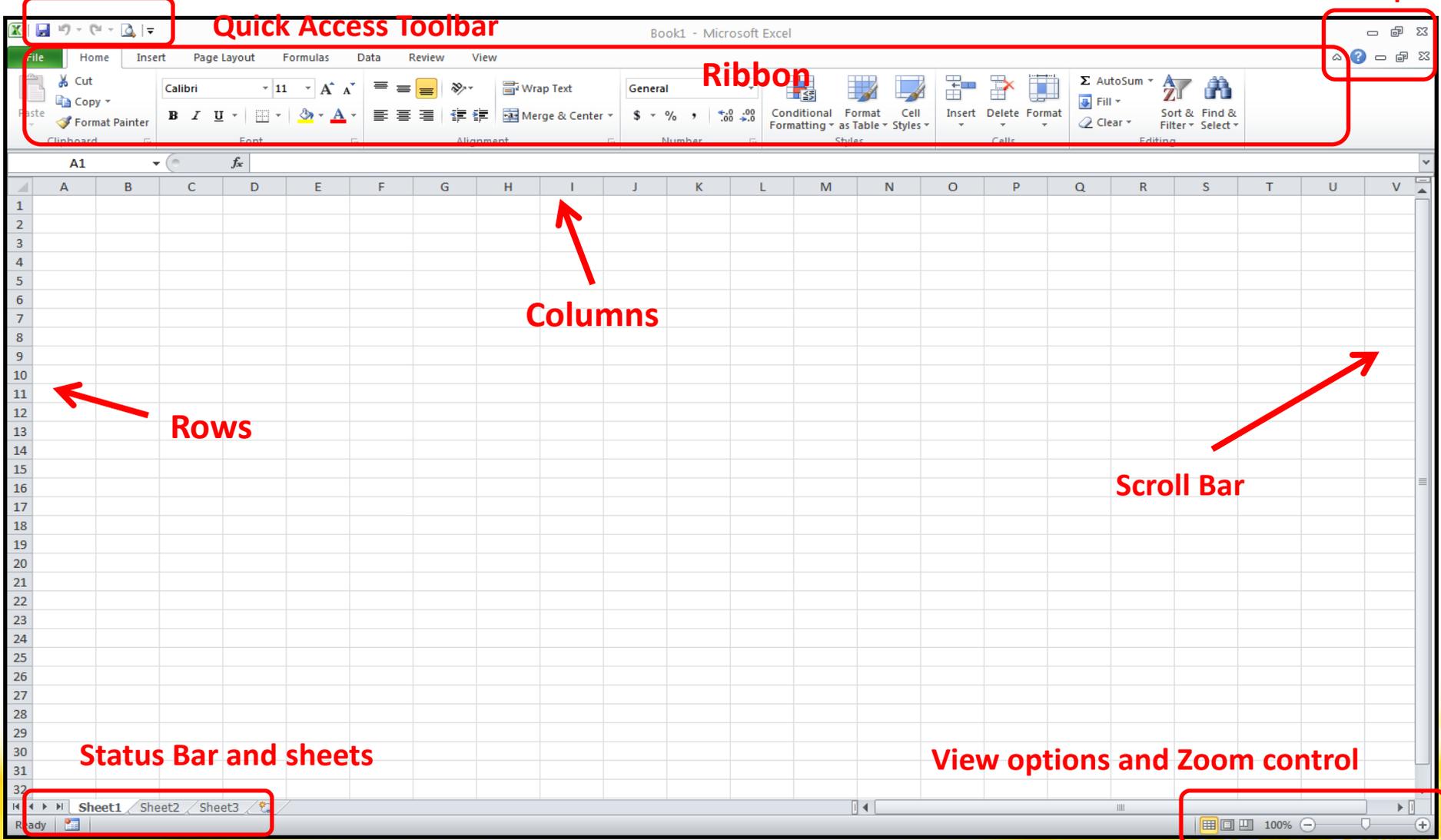
Debbie Minnerly

# Course goals

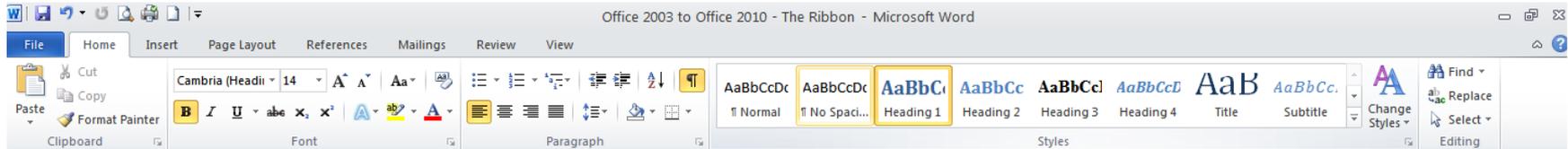
- ❖ Learn about editing existing data
- ❖ Use functions available in Excel
- ❖ Create a simple chart
- ❖ Learn how to use Filter

# Office Environment in Excel

Window controls and Help



# Excel 2010 Ribbon



 File

 Home

 Insert

 Page Layout

 Formulas

 Data

 Review

 View

# Excel 2010 Information

- ❖ Available Columns:  
A through XFD – 16,384 columns
- ❖ Available Rows:  
1 through 1,048,576
- ❖ **There are over 17 billion cells in each worksheet!!!!**
- ❖ A cell is the intersection of a column letter and a row number. The cell address can be found in the Name Box just above column A.

# Excel 101 Review

1. When entering data, don't create empty cells – it's OK if data from one cell "spills over" into another cell. Adjustments can be made to column width to compensate for that.
2. Pay attention to what is actually in the cell – it could look like a number that was typed, but could be a formula
3. Remember how the mouse pointer changes to accomplish different tasks
4. The Name Box just above column A shows you what cell is active and there should be a dark border around the active cell. If you have multiple cells selected, the first cell shows in the cell reference area and that cell is white, while the others are shaded to show that they are selected.
5. All formulas begin with the equals sign (=)

# Working with the Quick Access Toolbar

You were introduced to the Quick Access toolbar in Excel 101. You can easily add some useful tools to the toolbar. To add/remove an item, click the down arrow to the right of the toolbar and click an item to add it. If it has a checkmark, it's already displayed and clicking it will remove it.

- ❖ New workbook
- ❖ Quick Print
- ❖ Open

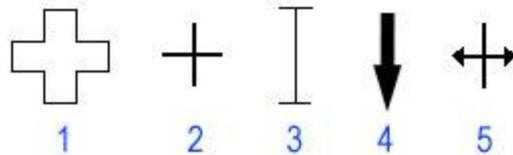


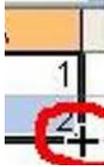
Customize  
Quick Access  
Toolbar

**Reordering the tools on Quick Access toolbar**– icons are shown in the order added. You could remove each tool, then re-add to change the order, or click the down arrow to the right of the toolbar and choose More Commands...

The selected Quick Access Toolbar icons are on the right-hand side. Click one and choose to move it up or down. Click OK.

# Mouse Pointers in Excel



- 1. Select** – main mouse pointer used for selecting cells. Click once in a cell to select it or click and drag to select several cells.
- 2. Fill** - appears after you have selected a cell (or cells) and will show only at the **bottom right of the selection** (tiny box called the Fill Handle). Using this will allow you to fill a series such as Monday, Tuesday, Wednesday, etc.  

- 3. Insertion point** - appears when you are typing or have double-clicked in a cell. The flashing insertion point determines where new text and numbers appear.
- 4. Column/Row selector** - appears when you are over a column or row, allowing you to click once to select the entire column or row
- 5. Resize** - appears when you are between columns or rows, allowing you to resize them

# Working with Worksheets

- ❖ Each Excel file is a Workbook containing one or more Worksheets
- ❖ Default setting provides you with three worksheets – you can add or remove as needed from there:
  - ❖ To add a worksheet, right-click a tab and choose Insert, then click OK to add a Worksheet (note – they begin adding as sheet4, sheet5, etc. – sheets can be renamed as needed), or click the Insert Worksheet tab after the last sheet
  - ❖ To remove a worksheet, right-click the tab of the sheet to be removed, then choose Delete
- ❖ To move a worksheet, click on the sheet tab and drag it to the new position
- ❖ To rename a worksheet, right-click on the sheet tab and choose Rename – the new name can be 31 characters long and can contain spaces
- ❖ To change the color of the sheet tab, right-click on the sheet tab, choose Tab Color and pick a color (to see the full effect of the color click another tab)

**If you want to control how many sheets are in each new workbook, go to File/Options/General – in the “When creating new workbooks” section, you can adjust how many sheets are in each new workbook (note – this does not affect any workbooks you’ve already created).**

# Navigating multiple worksheets

- ❖ Once you have several worksheets in the workbook, some sheets may be scrolled off the screen to the right or left
- ❖ There are navigation buttons to the left of the sheet tabs (just below the row numbers). You can click those buttons right or left until the sheet you need comes into view.



- ❖ Another option is to right-click on the navigation buttons and pick the sheet from the list of sheets in the workbook

# Basic Editing

- ❖ Click a cell to type into it. After typing, press Enter to move down one cell or press right arrow key (or tab) to move to the right one cell.
- ❖ To delete the contents of a cell, select the cell, then press Delete on the keyboard (never press Spacebar to remove something from a cell – it leaves a character in the cell)
- ❖ To replace something in a cell (or cells), select the cell (or cells), then begin typing the replacement. Or, you can press Delete on the keyboard before typing the replacement.
- ❖ Undo/Repeat the replacement (this works even after the workbook has been saved)
- ❖ Select a cell and choose Cut (to move data) from the Ribbon or choose Copy (to make a copy of the data)
- ❖ Click in a new cell and choose Paste from the Ribbon to paste the cut or copied data

Remember – there is always more than one way to accomplish a task (usually two or three ways) so find what works for you.

# Editing Existing Data

To edit data that is already in the worksheet:

- ❖ Click once on the cell to make it active. Then click in the Formula Bar where you would like to add/remove information (remember, the insertion point needs to be in the correct location) and make the change(s), then press Enter to accept the change(s).

Or you can double-click in the cell to get into Edit mode, then click in the data where you would like to add/remove information (remember, the insertion point needs to be in the correct location) and make the change(s), then press Enter to accept the change(s).

Note – you can also press F2 to enter Edit mode if you prefer to use the keyboard

# Using AutoFill to work faster

AutoFill can help you fill in days of the week or months of the year. Did you know you can also create your own lists?

- ❖ Excel recognizes serial data, so if you type Q1 into a cell and AutoFill from there, it will automatically put Q2 into the 2<sup>nd</sup> cell and continue on that way. And, Excel knows that quarters end at 4, so when it reaches Q4, it will begin again with Q1.
- ❖ You can also copy formulas using AutoFill – cell references will adjust as you copy

To teach Excel what you want it to do, type the first two in the series (one per cell), select both cells, then AutoFill

# Formulas

Excel can handle calculations – from very simple summing (adding) to very complicated multi-formula calculations

- ❖ Excel uses Formulas to perform calculations
- ❖ **All formulas begin with = (the equals sign, next to Backspace key on the keyboard)**

- ❖ Add - +
- ❖ Subtract - -
- ❖ Multiply - \*
- ❖ Divide - /

Order of Precedence
Percent
Exponentiation
Multiplication/Division
Addition/Subtraction

- ❖ A Circular Reference is created when you include the cell that contains the result in your formula – if you begin a formula in cell B8, then include B8 in the formula, you will get a message about a circular reference and the formula will not calculate correctly.

# Errors when creating formulas

What Shows Up in the Cell	What's Going On Here?
#DIV/0!	Appears when the formula calls for division by a cell that either contains the value 0 or, as is more often the case, is empty. Division by zero is a no-no in mathematics.
#NAME?	Appears when the formula refers to a <i>range name</i> that doesn't exist in the <u>worksheet</u> . This error value appears when you type the wrong range name or fail to enclose in quotation marks some text used in the formula, causing Excel to think that the text refers to a range name.
#NULL!	Appears most often when you insert a space (where you should have used a comma) to separate cell references used as arguments for <u>functions</u> .
#NUM!	Appears when Excel encounters a problem with a number in the formula, such as the wrong type of argument in an Excel function or a calculation that produces a number too large or too small to be represented in the worksheet.
#REF!	Appears when Excel encounters an invalid cell reference, such as when you delete a cell referred to in a formula or paste cells over the cells referred to in a formula.
#VALUE!	Appears when you use the wrong type of argument or operator in a function, or when you call for a mathematical operation that refers to cells that contain text entries.

To find out more about an error, click the cell with the green triangle

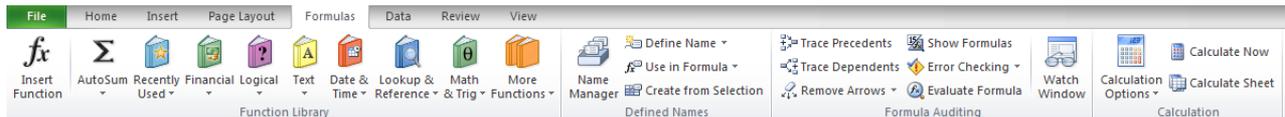
Copied from <http://www.dummies.com/how-to/content/deciphering-error-values-in-excel-2010-formulas.navId-405658.html>

# Functions

- ❖ Functions can help you perform complicated calculations easily. To access Functions, click the Insert Function ( $fx$ ) button on the formula bar



- ❖ Functions and formulas can also be accessed on the Formulas tab in the Ribbon



- ❖ You'll need to have some understanding of functions in order to use them, so refer to

<http://www.dummies.com/how-to/content/commonly-used-excel-functions.navId-405656.html>

**OR**

<http://www.excelfunctions.net/ExcelFunctions.html>

note: this site provides links to explain and show examples for each function.

# Filtering

- ❖ Filtering can help you by showing you only the data you need to see at the moment. The other data is still there, but hidden when you filter.
- ❖ To filter, click on any cell within the data (note – Excel sees an empty row or column as the end of the data). Click the Data tab on the Ribbon and click the Filter button.
- ❖ Once the filter is set on, you will see down arrows at the top of each column. If you have column headings (highly recommended), those will be the cells with the down arrows
- ❖ To filter the data, click the down arrow in the column, make your choices and click OK. Note – to de-select everything turn off the checkbox in Select All by clicking the box, then select individual values

# Filtering continued

- ❖ When you have data filtered there are visual cues on the screen.  
You should see blue row numbers and there should be a filter picture (looks like a funnel) on the column that is filtered. When you hover over a down arrow you will see Showing All. When you hover over the funnel, you will see the data filter that was applied.  
The status bar shows how many records are displayed with the filter applied.
- ❖ To return to Showing All of the data on a filter, click the filtered column heading (the funnel), choose Select All, then click OK
- ❖ Turn off Filter the same way you turned it on. Go to Data, then click Filter

# Creating Charts

- ❖ Charts are pictures of worksheet data. Pictures are much easier for others to get a better understanding of the numbers in a spreadsheet.
- ❖ To create a chart in Excel, first choose the data you would like to include in the chart (click once to select a single cell in the data or click and drag to select several cells if you want the chart to display data from certain cells). Then, go to the Insert tab – in the Chart group choose the type of chart to represent your data. The chart will become part of your worksheet.

For help in choosing chart types, go to <http://www.dummies.com/how-to/content/how-to-choose-the-right-chart-type-in-excel-2010.html> .

# Working with charts

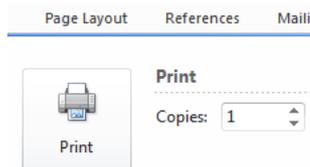
- ❖ Once inserted, you can make changes to a chart, including changing it's type.
- ❖ Note the new tabs that appear when the chart is selected: Design, Layout & Format. These allow you to work with the chart to customize it.
- ❖ One of the changes you can make is to the grouping of your data to see it represented in a different way – this can highlight data that might not have been obvious before.  
Be sure the chart is selected – on the Design tab, click Switch Row/Column.

# Printing

1. Go to File/Print
2. Print Preview shows how your worksheet will appear printed (you can zoom in or out and move to other pages in your worksheet).

If you decide to make formatting changes, you'll need to go back to the workbook – click File a 2<sup>nd</sup> time or click Home to get back to the workbook.

3. Be sure to click the Print button on the left side to send the worksheet to the printer.



# Getting Help in Office

- In any Office 2010 program, go to File/Help/Getting Started. This brings you to the Office website for that program where you can:
  - See what's new in a program
  - Make the switch from a previous version
  - Find menu items in the ribbon and learn basic tasks

Excel 2010 Getting Started web page:



If you know Excel 2007, used an earlier version of Excel, or have never used Excel before, explore these resources to begin learning how to use the latest version.

WHAT'S YOUR SITUATION?	WHERE TO GO
<b>Familiar with Excel 2007?</b> Find out what is new for Excel 2010 from the last version.	<a href="#">What's new in Excel 2010?</a>
<b>Used an earlier version of Excel?</b> Take an online course to learn how to use this version of Excel and what it can do for you.	<a href="#">Make the switch to Excel 2010</a>
<b>Missing the menus?</b> Use an animated guide that lets you point to menus, toolbars, and commands in Excel 2003 to see where they are in Excel 2010.	<a href="#">Interactive menu to ribbon guides</a>
<b>Never used Excel before?</b> Learn how to perform common tasks with Excel 2010.	<a href="#">Basic tasks in Excel 2010</a>

For more information about how to get started with other Microsoft Office products, see [Getting Started with Microsoft Office 2010](#).

# Commonly used tasks in Excel 2010

## – New

- Click **File/New**
- Choose type of workbook (default is blank) then click Create

## – Save

- Click the **Save** button in the Quick Access Toolbar (above the ribbon) – we recommend using this button often – you can't wear it out!

## – Save As (save a duplicate of the file with a new name)

- Click **File/Save As**
- Name the file, then click Save (you are now working with the new version of the file – the original has closed and will stay as you left it)

## – Open

- Click **File/Open**
- Choose a file, then click Open

# Commonly used tasks in Excel 2010

## — Close

- Click **File/Close** to close the current workbook and continue working in Excel. If you want to exit Excel, you can click the x in the top right corner.

## — Recent Files List

- Click **File/Recent**  
You'll see a list of your recent files, newest at the top, as well as folders you have recently opened
- To quickly access the most recent files, click the checkbox next to Quickly access this number of files and set the number of files (default is 4). They will appear just above Info.

## — Print Preview

- Click **File/Print** (the preview appears on the right side of the screen)

# Commonly used tasks in Excel 2010

## – Print

- Click **File/Print**.
- Choose print settings as needed – to choose properties of the selected printer, click Printer Properties

## – Format Painter (Word, Excel, PowerPoint)

- Select the formatted text to copy, click **Home/Format Painter**.
- Click where you would like to apply that formatting

## – Page Setup

- Click Page Layout tab, then Page Setup group. If you would like to see all options for Page Setup, click the Dialog Box Launcher (arrow to the right in the Page Setup group)

# Commonly used tasks in Excel 2010

## – Undo

- To undo the last task, click the **Undo** button in the Quick Access Toolbar (above the ribbon) – click multiple times to undo multiple tasks

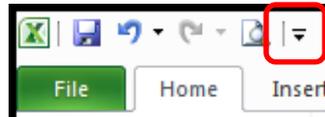
## – Options

- Click **File/Options** – categories are on the left. When making changes to options, make changes slowly so you can test and be sure Excel is working the way you'd like it to work. You can undo options by unchecking each one, but there is no reset to return to the default options.

# Customizing Office Programs

- **Customizing the Quick Access Toolbar**

- Click the down arrow near the Undo button (top left of screen)



- Choose from the common tasks shown. If there is no checkmark next to an option, click to turn on. If checked, click to turn the option off.

*Note:* Click More commands...to open a window to choose any command to add to the Quick Access Toolbar

# Resources



## Books

- ❖ Microsoft Office Excel 2010 QuickSteps by John Cronan
- ❖ Excel 2010 Simplified by Paul McFedries
- ❖ Teach Yourself Visually Excel 2010 by Paul McFedries
- ❖ Excel 2010 Workbook for Dummies by Greg Harvey
- ❖ Microsoft Office 2010 All-In-One For Dummies by Peter Weverka
- ❖ Office 2010 For Dummies by Wallace Wang
- ❖ Discovering Microsoft Office 2010 : Word, Excel, Access, PowerPoint by Edward G. Martin

All books on this list are available in the Mid-Hudson Library system



# Resources - Websites

Cheat Sheet – Excel 2010 Keyboard Shortcuts and Ribbon Commands

<http://www.dummies.com/how-to/content/excel-2010-allinone-for-dummies-cheat-sheet.html>

Excel User Blog (business users)

<http://exceluser.com/blog/>

Main site:

<http://exceluser.com/>

Mr. Excel (tips and tutorials) - 2003 and 2007 tips (versions 2007 and 2010 are very similar)

<http://www.mrexcel.com/articles.shtml>

Working with functions

<http://www.dummies.com/how-to/content/commonly-used-excel-functions.navid-405656.html>

<http://www.excelfunctions.net/ExcelFunctions.html>

Errors in Formulas

<http://www.dummies.com/how-to/content/deciphering-error-values-in-excel-2010-formulas.navid-405658.html>

Choosing the right chart type

<http://www.dummies.com/how-to/content/how-to-choose-the-right-chart-type-in-excel-2010.html>

We can send you a document in PDF format with clickable links – please provide your email address on the evaluation to receive the document.

# Contact Information

**To contact PPLD Technology Trainers in BTOP  
(Broadband Technology Opportunities Program):**

**Email – [BTOP@poklib.org](mailto:BTOP@poklib.org)**

Debbie Minnerly – [dminnerly@poklib.org](mailto:dminnerly@poklib.org)

**Phone – 845-485-3445**

Debbie Minnerly - x3380

# THANK YOU!