

Design Document: Microsoft Excel 2010 Basics

Class Description

Microsoft Excel allows users to work with numbers and data by creating spreadsheets. This class introduces you to spreadsheets and covers topics like how to create/modify them, format cells, and add borders to columns and rows.

Curriculum Track

Microsoft Tools

Audience

Adults

Course Length

90 minutes

Training Method

Instructor-led hands-on

Purpose

To introduce users to the basic functions and operations of Microsoft Excel.

Equipment Requirements

Projector and projection screen; computers with internet access for the instructor and each participant; laser pointer (recommended)

Software Requirements

Windows 7, Microsoft Excel 2010

Material Requirements

Pens or pencils, activity sheet, handouts, participant surveys

Learning Objectives

At the end of the session, learners will be able to:

- Identify and explain the function of the **Ribbon**, **Tabs**, **Command Groups**, and the **Dialog Box Launcher**
- Enter, edit, and format data within a cell
- Navigate between and select multiple cells within a spreadsheet
- Move, copy, and paste data from one cell to another

Assessment Technique(s)

Successful completion of class activities

Content Outline

Agenda (2 mins.)

- Outline the following topics that will be covered in the class:
 - Organization (how the features and functions are grouped and accessed within Excel)
 - Navigation (how to get around in a spreadsheet)
 - Entering and Merging Data (how to enter data, use the **Auto-fill** option, and merge cells)
 - Selecting/Editing Data (selecting individual or multiple cells, selecting an entire spreadsheet, recognizing pointer shapes, filling data, and deleting data from a cell)
 - Moving and/or Copying Data (cutting, copying, pasting, using the **Control** key)
 - Simple Formatting (formatting text, adding borders, changing cell alignment, adding symbols to numerical calculations)

Topics, Talking Points, and Activities (85 mins.)

- Organization
 - Pull up Excel and show participants the **Ribbon**; explain that this is the area where all features are found in Excel
 - Explain that like features and functions are organized into **Tabs**, making them easier to find
 - Share that within each **Tab** there are collections of like tasks called **Groups**
 - Point out that features are actioned either by clicking on their buttons or by clicking on a **Dialog Box Launcher**; demonstrate what participants will see by hovering over a button and clicking on one of the **Dialog Box Launchers**
 - Show participants the **Save** button and explain its function
 - Show participants how to print using both the **Quick Print** button in the **Quick Access Toolbar** and **File > Print**
 - Explain that you will cover how to adjust margins, orientation, and size before printing when you discuss formatting

ACTIVITY: Have participants complete **Activity #1** on the *Activity Sheet*

- Navigation
 - Explain that users can navigate in any direction between cells by pressing the arrow keys
 - Explain that users can press the **Enter** key to move to the cell immediately below the one they are in
- Entering and Merging Data
 - Entering Data

- Explain that Excel recognizes numbers, text, or formulas as data; give examples of 850, Hours of Operation are 9am-6pm, and =SUM(A1:A12)
- Explain that data is entered in a cell by clicking on the cell, typing in the number, text, or formula, and pressing the **Enter** key or one of the arrow keys to move to another cell
- Show participants an example and point out that the data is visible in both the cell and the **Formula** bar above
- Share that if a mistake is made when entering the data it can be undone by clicking the **Esc** key; also share that hitting the **Undo** button undoes the last action performed if no longer in the cell
- Be sure to point out that if the numbers suddenly change to pound signs (#), it means the data is bigger than the cell size. Explain that the width can be adjusted by double-clicking on the right side of the cell border
- **Merging Cells**
 - Explain that the merge function is most commonly used to put a header over a data table or range of cells
 - Outline these steps for merging multiple cells into one:
 1. Select the range of cells
 2. Click the **Merge and Center** button in the **Alignment** group on the **Home** tab




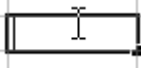


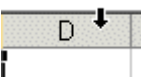

ACTIVITY: Ask participants to complete **Activity #2** on the *Activity Sheet*

- **Selection/Editing Tools**
 - Share that selecting a range of cells is accomplished by Clicking and Dragging using these steps:
 1. Click inside the first cell
 2. Hold down the left mouse button and drag across, down, or down and across the desired cells
 3. Release the left mouse button
 - Point out that the **Select All** button allows a user to select the entire worksheet
 - Explain that there are two ways to edit data within a cell:
 1. Inside the cell
 - a. Double-click in the cell
 - b. Left-click on the spot where you want to edit the data
 - c. Make the correction, and then press the **Enter** key
 2. In the **Formula** bar
 - a. Click on the cell
 - b. Left-click in the formula bar on the spot where you want to edit the data
 - c. Make the correction, and then press the **Enter** key
 - Share that replacing data within a cell is accomplished in the same way, except that users will use the left mouse button to highlight the data and type the new data in its place

ACTIVITY: Ask participants to complete **Activity #3** on the *Activity Sheet*

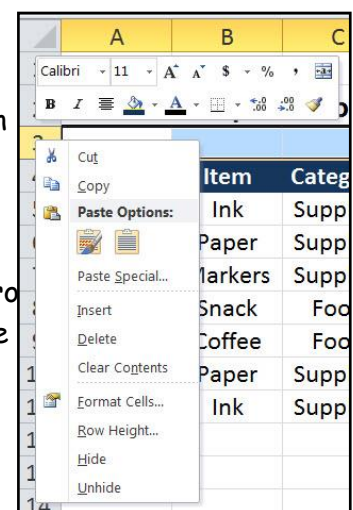
○ Pointer shapes

- Share that there are several different pointer shapes in Excel and that each one indicates a specific type of function. Use the chart below to explain how each is used

Shape	Used to:
	Select a cell or range
	Drag selected cell or range - you can drag a selection when the pointer is over the border of the selection
	Fill (copies values into the cells you drag across) or fill series (copies a pattern of values such as days of the week)
	Entering or editing data. The cursor (vertical line inside the cell) blinks.
	Resize column
	Resize row
	Select whole column
	Select whole row

○ Inserting or Deleting a Column or Row

- Explain that sometimes a user will need to add a row or column to a spreadsheet or find that he or she no longer needs one.
- Outline the process adding or deleting a row or column after discussing how to select a whole column or row in the **Pointer Shape** section above (click the right mouse button after the row or column is selected). Be sure to show an example like the one to the right




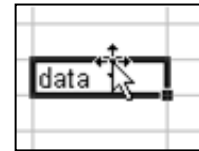
○ Filling Data

- Share that users can fill in several types of data by selecting cells and dragging across or down when the pointer turns to the black cross (+)
- Point out that once the cell range is selected, users click on the **Auto Fill Options** button to access the menu of choices for auto-filling the range. Choices include **Copy Cells**, **Fill Series**, **Fill Formatting Only**, and **Fill Without Formatting**. Explain how each is used.
- Explain that data is deleted from a cell or group of cells by clicking on the cell(s) and pressing the **Delete** key

ACTIVITY: Ask users to complete **Activity #4** on the *Activity Sheet*

- **Move and/or Copy Data**

- Share that you can move or copy data in the worksheet by completing the following steps:
 1. Select the cells you want to move or copy
 2. Move the mouse pointer to the edge of the selection until the cursor appears as shown on the right
 3. To move the selection, drag it to the desired location.
 4. To copy the selection, hold down the **CTRL** button as you drag it to the desired location
- Share that you can move or copy data to another worksheet by completing the following steps:
 1. Select the cells you want to move or copy.
 2. To move the selection, click the **Cut** [✂] button on the **Home** tab.
 3. To copy the selection, click the **Copy** button on the **Home** tab.
 4. If needed, go to the spreadsheet onto which you wish to copy or move the data.
 5. Click in the cell where you wish to paste the data 
 6. Click the arrow below the **Paste** button to select formatting options and paste the content.



ACTIVITY: Ask users to complete **Activity #5** on the *Activity Sheet*

- **Simple Formatting**

- Share that most of the standard formatting options are available on the **Home** tab and include the following tools:
 - **Font group**
 - ✓ **Font:** allows users change text font
 - ✓ **Font Size:** allows users to change text size
 - ✓ **Bold:** allows users to bold text or data
 - ✓ **Italic:** allows users to italicize text or data
 - ✓ **Underline:** allow users to underline text or data
 - ✓ **Font color:** allows users to change font color
 - ✓ **Fill color:** allows users to fill a cell with color

- ✓ **Border:** allows users to put gridlines around text, a cell, or a page
- **Alignment group**
 - ✓ **Top Align, Middle Align, Bottom Align:** allows users to align text to the top of the cell, center it evenly between the top and the bottom, or align it to the bottom
 - ✓ **Left Align, Center Align, Right Align:** allows users to align text to the left, center, or right margin of the cell
 - ✓ **Decrease Indent/Increase Indent:** allows users to decrease or increase the margin between your text and the cell border
 - ✓ **Orientation:** allows users to rotate text to a vertical or diagonal orientation (frequently used to label narrow cells)
 - ✓ **Wrap text within a cell:** allows users auto-expand the row height of a cell to be sure all text within in is visible
 - ✓ **Merge and Center:** allows users to join multiple cells into one cell and center the text inside of it (typically used for headers)
- **Number group**
 - ✓ **Accounting Number Format:** allows users to add symbols like dollar signs, percent signs, and commas
 - ✓ **Increase Decimal/Decrease Decimal:** allows users to show more or less precise figures by displaying more or less decimal places
- Share that to use the formatting options, a user needs to select the cell or cell range and click on the desired button.

ACTIVITY: Ask users to complete **Activity #6** on the *Activity Sheet*

NOTE: If participants finish early or there is time left at the end of class, encourage them to work on the supplemental *Review* worksheet for additional practice.

Wrap Up/Closing (3 mins.)

- Highlight the upcoming technology classes and share the types of topics that will be covered
- Ask if there are questions and answer any that were "parked" during the session
- Thank participants for coming and ask them to complete the class survey before leaving