EXCEL BASICS

What is Excel?
Excel is a computerized spreadsheet that allows you to:
- organize data.
- complete calculations.
- make decisions.
- graph data.
- develop professional-looking reports.
- convert Excel files for use on the Web.

It is an important business and educational tool that helps analyze and evaluate information. It is used for recording and figuring grades and attendance, cash flow analysis, budgeting, decision-making, cost estimating, inventory management, and financial reporting.

Three Major Parts of Excel

Worksheets
- Worksheets allow you to enter, calculate, manipulate, and analyze data such as numbers and text.
- These are sometimes referred to as spreadsheets instead of worksheets.

Charts
- Charts are a pictorial representation of data.
- This feature can be used to draw a variety of two-dimensional and three-dimensional charts.
- Excel makes it easy to create charts in several different varieties, such as bar charts, line charts, or column charts.

Databases
- Databases are used to manage data.
- With this feature, you can sort data entered into a worksheet.
- It is also possible to search for specific data using a database.
- When using the database feature in Excel, it is possible to filter information to select data that meets specific criteria.
- The database function is also used to add subtotals to cells that meet specified criteria.

Open Excel
- Click the Search box next to the Start button.
- Click the link at the top of the Start Menu.

or
- Click Start on the Task Bar. This is the button that appears in the bottom left corner of the computer window.
- Scroll down to locate and select the link for Excel 2016.
Tabs/Ribbons

The Tabs and Ribbons are used to access commands in the Excel program.
Under each tab, there are ribbons that contain groups of buttons that are needed to perform the operations for working with the workbooks.
Each of these tabs is described in separate documents within the Excel 2016 Training Web page.

Formula Bar

This bar is used to display the contents of the active cell.
Cells can contain content such as Text, Numbers, Formulas, and Functions.
The data entered into a worksheet cell is displayed in the Formula Bar before it is displayed in the cell.

Name Box

This box appears at the left of the Formula Bar.
It is used to display the cell reference for the active cell, for example A1.
If Range Names have been created within the workbook, they can be accessed by clicking the list arrow at the end of this box.

Status Bar

This bar displays at the bottom of the screen.

- It is used to display:
  - A brief description of the command selected.
  - The current activity mode that is in progress.
  - What mode you are operating in such as Ready mode or Edit mode.
  - The views for the document. These are from left to right; Normal, Page Layout, and Page Break Preview.
  - The Zoom Bar. This bar is used to enlarge or reduce the size of the current view. The plus and minus signs are used to change the zoom range.

Pointer

This is the indicator that moves on the screen when the mouse is moved.
It changes shape to reflect the type of task being performed.

Sheet Tabs

These tabs are used to identify the name of the worksheet.
They are displayed at the bottom left side of the workbook window.
To select a tab, click on the desired sheet name, such as Sheet 1.
These tabs can be renamed to reflect what is contained in the worksheet.
- Right-click the tab and select Rename.
Double-click the **Tab** and then input a new name.

The color of the tab can also be changed.

- Right-click the tab.
- Move the mouse pointer over the **Tab Color** option.
- Select a color from the gallery of colors.

New sheet tabs may be added to a workbook.

- Click the **New Sheet** button at the bottom of the window.
  
  or
  
- Click the **Home Tab**.

- In the **Cells Group**, click the **Insert** arrow.
- Click **Insert Sheet**.

**Sheet Tab Scroll Buttons**

- These buttons are used to scroll through the sheet tabs.
- They are located on the bottom-left side of the window.

- **Right-click** – This option is used to open the **Activate** window. This window displays a list of the sheets in the workbook window. Click a sheet and then click **OK**. The selected sheet will be displayed.

**Workbook**

- The workbook is organized like a notebook.
- Inside each workbook are sheets called worksheets.
- Each name for the worksheet appears on a sheet tab.

**Worksheet**

- A worksheet is organized into a rectangular grid.
- The worksheet contains columns and rows.
- Letters identify the columns. There are more than 16,000 columns.
- Numbers identify the rows. There are more than one million rows.

**Cell**

- This is the intersection of each column and row.
- It is the area where the data is entered.

**Cell Reference**

- This is the unique address of a cell.
- The column letter is specified first.
- The row number is specified second
- Examples of cell references are A1 and B1.

**Active Cell**

- This is the cell where the data may be entered.
- A black border appears around the **Active Cell**.
Active Cell Reference
⋆ This information is displayed immediately above column A in the Name Box.
⋆ The column letter and row number of the cell that is active becomes darker.
⋆ It makes it easier to identify the cell reference.

Gridlines
⋆ These are the horizontal and vertical lines in a worksheet.
⋆ It makes it easy to see and identify cells.
⋆ This option can be turned off so the gridlines don’t display.
⋆ The gridlines DO NOT show when the worksheet is printed unless that option is selected in the workbook.

Text
⋆ Text is a combination of letters, symbols, numbers, and spaces.
⋆ Text is used to describe data.
⋆ It is also used to label columns and rows.
⋆ Text entries automatically align to the left in the column.

Values (Numbers)
⋆ Values represent a quantity.
⋆ Examples of values are 378, 25.275, -55.
⋆ By default, values are right-justified in the cell.
⋆ The justification can be changed to left or center.
⋆ Values can contain any digits zero through nine.
⋆ Values can also contain any of the following special characters; + - ( ) , / . $ % E e

Formulas
⋆ These are the arithmetic operators used to calculate values.
⋆ They always begin with an equal (=) sign. Arithmetic operators are:
  ✪ Addition (=B1+B2).
  ✪ Subtraction (=B1-B2).
  ✪ Multiplication (=C9*B9).
  ✪ Division (C9/B9).
  ✪ Exponentiation (=B5^3).

Function
⋆ This is a predefined or built-in formula.
⋆ Functions are shortcuts for commonly used calculations.
  ✪ The SUM function totals values in rows or columns.
  ✪ The AVERAGE function finds the average of the numbers in rows or columns.
⋆ Functions can be defined for a range of cells or for a single cell.
⋆ All functions begin with an equal (=) sign.
⋆ A range is a group of cells which can be either a rectangular block of cells or a single cell.