**Computer Literacy** – Excel Spreadsheets

# Excel Basics

1. Excel 2016 is a spreadsheet program that allows you to store, organize, and analyze information.
2. The \_\_Home tab gives you access to some of the most commonly used commands for working with data in Excel 2016, including copy and paste, formatting, and number styles.
3. Backstage view gives you various options for saving, opening a file, printing, or sharing your workbooks.

# Cell Basics

1. Excel files are called workbooks. Every worksheet is made up of thousands of rectangles, which are called cells.
2. Columns are identified by letters. Rows are identified by numbers.
3. A group of cells is known as a cell range. A cell range is group of adjacent cells. Example – A1:B12
4. An active cell is a selected cell identified by a thick black border and the location is shown in the name box.
5. To select all the cells in a worksheet, click the Select All button located in the upper-left corner of the workbook window.
6. You can select nonadjacent cells by pressing the Ctrl key while clicking.

# Modifying Columns, Rows, and Cells

1. By default, every row and column of a new workbook is always set to the same height and width.
2. It’s easy to delete any row that you no longer need in your workbook.
3. Whenever you have too much cell content to be displayed in a single cell, you may decide to wrap the text or merge the cell rather than resizing a column.
4. To remove all data from a cell, you can use the Clear button on the Home tab.
5. You can edit or delete data directly in the cell by selecting the cell and pressing F2.

# Formatting Cells

1. You can apply both vertical and horizontal alignment settings to any cell.
2. Cell borders and fill colors allow you to create clear and defined boundaries for different sections of your worksheet.
3. One of the most powerful tools in Excel is the ability to apply specific formatting for text and numbers.
4. The default formatting for cell is General formatting.

# Worksheet Basics

1. Whenever you create a new Excel workbook, it will contain one worksheet named sheet 1.
2. If you need to duplicate the content of one worksheet to another, Excel allows you to copy an existing worksheet.
3. You can add multiple sheets to a workbook. The name of the sheet is shown on the sheet tab.

# Sorting Data

1. As you add more content to a worksheet, organizing that information becomes especially important. You can quickly reorganize a worksheet by sorting your data.
2. If you need more control over how your data is sorted, you can add multiple levels to any sort. This allows you to sort your data by more than one column.

# Conditional Formatting

24. Conditional formatting allows you to automatically apply formatting- such as colors, icons, and data bars – to one or more cells based on the cell value.

# Filtering Data

1. Filters can be used to narrow down the data in your worksheet, allowing you to view only the information you need.
2. Excel allows you to search for data that contains an exact phrase, number, date, and more.

# Freezing Panes

1. You may want to see certain rows or columns all the time in your worksheet when you scroll, especially header cells.
2. To do this, you use the Freeze button on the View tab.

# Simple Formulas

1. The formula bar is located to the right of the Name Box. The formula bar displays the value or formula of an active cell.
2. One of the most powerful features in Excel is the ability to calculate numerical information using formulas.
3. Every formula begins with an equal sign.
4. An operand is the cell reference or a number in a formula.
5. The plus sign (+) in a formula is an example of an operator.
6. Rather than typing cell addresses manually, you can point and click on the cells you wish to include in your formula.

# Complex Formulas

1. When there is more than one operation in a formula, the order of operations tells Excel which operation to calculate first.
2. Parentheses are the best way to define which calculations will be performed first in Excel.

# Functions

1. A function is a predefined formula that performs calculations using specific values in a particular order.
2. Functions are meant to perform complex mathematical operations quickly.
3. The Greek letter sigma identifies the Autosum button on the Home Ribbon and allows you to access commonly used function formulas.
4. Excel has more than 300 function formulas. A function formula has three parts – equal sign, function name, and argument.

# Relative and Absolute Cell References

1. There are two types of cell references: relative and absolute.
2. A relative cell reference adjusts to its new location when copied or moved.
3. If a formula contains a relative cell reference, the operator stays the same, but the operand changes when the formula is copied or moved.
4. An absolute cell reference does not change the operands or operators when copied or moved to a new location.
5. To create an absolute cell reference, you need to insert a $ before the column letter and/or row number of the cell reference you want to keep the same.
6. A formula with absolute and relative cell references (Ex. - =A6+$B$7) is called a mixed cell reference formula.

# Charts

1. Charts allow you to illustrate your workbook data graphically, which makes it easy to visualize comparisons and trends.
2. Select your data first, and then select the appropriate chart type on the Insert ribbon.
3. The most commonly used chart types are pie, column, and line.

