# **Excel Basics**

#### Caitlin Myers • Instruction & Technology Librarian • cmyers@vapld.info

# **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 10, Microsoft Excel 2016

#### **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)
  - o 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
  - o Pull up Excel and show participants the **Ribbon**; explain that this is the area where all features are found in Excel
  - o Explain that like features and functions are organized into Tabs, making them easier to find
  - o 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

- o 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
  - o 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
  - o Merging Cells
    - o 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
  - o 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

<u>t</u>	Select a cell or range	4	Resize column
	Drag selected cell or range - you can drag a selection when the pointer is over the border of the selection		Resize row
	<b>Fill</b> (copies values into the cells you drag across) or fill series (copies a pattern of values such as days of the week)		Select whole column
Ĩ	<b>Entering or editing</b> data. The cursor (vertical line inside the cell) blinks.	<u>+2</u> 13	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.
- o 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.
- 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 shown on the right
- cursor appears as

- 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)
    - o 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

