Creating Charts and Graphs

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University of MOUNT OLIVE

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First things first...

Decide what information or messaging from your research/surveys needs to be displayed.

Pare down the information to what is truly necessary.

Enter the information into an Excel spreadsheet.
Select data for a chart

To create a chart in the Excel platform, you need to select at least one cell in a range of data (a set of cells).
Do one of the following:

If your chart data is in a continuous range of cells, select any cell in that range. Your chart will include all the data in the range.

If your data isn't in a continuous range, select nonadjacent cells or ranges. Just make sure your selection forms a rectangle.

TIP: If you don't want to include specific rows or columns of data in a chart, you can simply hide them on the worksheet, or you can apply chart filters to show the data points you want after you create the chart.
Arrange data for charts

Excel can recommend charts for you. The charts it suggests depend on how you’ve arranged the data in your worksheet. You also may have your own charts in mind. Either way, this table lists the best ways to arrange your data for a given chart.

For column, bar, line, area, surface, or radar charts, arrange the data in columns or rows.
For a **pie chart**, only one set of values (called a data series) is used. Data is entered in one column or row and one column or row is used for labels.
A doughnut chart can use one or more data series. Data is listed in one or multiple columns or rows of data, and one column or row of labels.
When using an **XY (scatter) chart**, in columns, place your x values in the first column and your y values in the next column. Remember, X values will run horizontally, and Y values are displayed vertically.
For **bubble charts**, add a third column to specify the size of the bubbles it shows to represent the data points in the data series.
Creating a chart with the 
Recommended Charts Tool
Select the data for which you want to create a chart.

Click **Insert > Recommended Charts**.
On the **Recommended Charts** tab, scroll through the list of charts that Excel recommends for your data, and click any chart to see how your data will look.

**TIP:** If you don’t see a chart you like, click **All Charts** to see all available chart types.
When you find the chart you like, click it > OK.

Use the **Chart Elements**, **Chart Styles**, and **Chart Filters** buttons next to the upper-right corner of the chart to add chart elements like axis titles or data labels, customize the look of your chart, or change the data that’s shown in the chart.
Add axis titles to a chart

When you create a chart, you can add axis titles to any horizontal, vertical, or depth axes in the chart. The titles will help the people who view the chart understand what the data is about. The x axis runs horizontally and the y axis runs vertically. You can’t add axis titles to charts that don’t have axes (like pie or doughnut charts).
Adding axis titles...step by step

Click anywhere in the chart to which you want to add axis titles.

Click the Chart Elements button **Chart Elements** button next to the upper-right corner of the chart.

Check the **Axis Titles** box.

Primary horizontal and vertical axis titles are added to the chart.
If your chart is a 3-D chart, or if it has secondary horizontal or vertical axes, click the arrow next to **Axis Titles**, and then click **More Options** to select the depth or secondary axis titles you want to add.

Click each **Axis Title** box that appears in the chart, and then type the text that you want.

To start a new line in the title, press **Shift+Enter**.

To format the axis titles, **right-click** them, and then click **Format Axis Title** to choose the formatting options you want.
Link axis titles to text on the worksheet

If you want to use text on the worksheet for your axis titles, you can link axis titles to the worksheet cells that contain that text. Linked titles are automatically updated in the chart when you change the corresponding text on the worksheet.

On the chart, click an Axis Title box.

On the worksheet, click inside the formula bar, and then type an equal sign (=).

Select the worksheet cell that contains the text that you want to use for the axis title.

Press Enter.

In addition to changing the text of axis titles, you may want to change the axis labels. You can also add a chart title to your chart.
Add or remove data labels in a chart

To quickly identify a data series in a chart, you can add data labels to the data points of the chart. By default, the data labels are linked to values on the worksheet, and they update automatically when changes are made to these values.

Data labels make a chart easier to understand because they show details about a data series or its individual data points. For example, in the pie chart below, without the data labels it would be difficult to tell that coffee was 38% of total sales. Depending on what you want to highlight on a chart, you can add labels to one series, all the series (the whole chart), or one data point.
Change the color or style of a chart

Maybe you’ve created a chart and think “this needs a little something else” to make it more impactful. Here’s where the Chart Styles button is your BFF. Click the chart, click Customize the Look of Your Chart button, located next to the chart in the upper right corner, and pick an option in the Style or Color galleries.
Change the color of a chart

Click the chart you want to change.

In the upper right corner, next to the chart, click **Chart Styles Customize the Look of Your Chart** button.

Click **Color** and pick the color scheme you want.

TIP: Chart styles (combinations of formatting options and chart layouts) use the theme colors. To change color schemes, switch to a different theme. In Excel, click Page Layout, click the **Color** button, and then pick the color scheme you want or create your own theme colors.
Change the chart style

Click the chart you want to change.

In the upper right corner next to the chart, click **Chart Styles Customize the Look of Your Chart** button.

Click **Style** and pick the option you want.

As you scroll down the gallery, Live Preview shows you how your chart data will look with the currently selected style.
To access additional design and formatting features, click anywhere in the chart to add the Chart Tools to the ribbon, and then click the options you want on the Design and Format tabs.
Still need more help? Ask Moye Library...

If you have additional questions or need help, please do not hesitate to ask a Moye Library team member.

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Chat with a Moye Library team member by going to the Moye Library home page on the UMO website. Enter your question in the box labeled ASK MOYE. This feature allows you to chat electronically with a team member in real time.

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