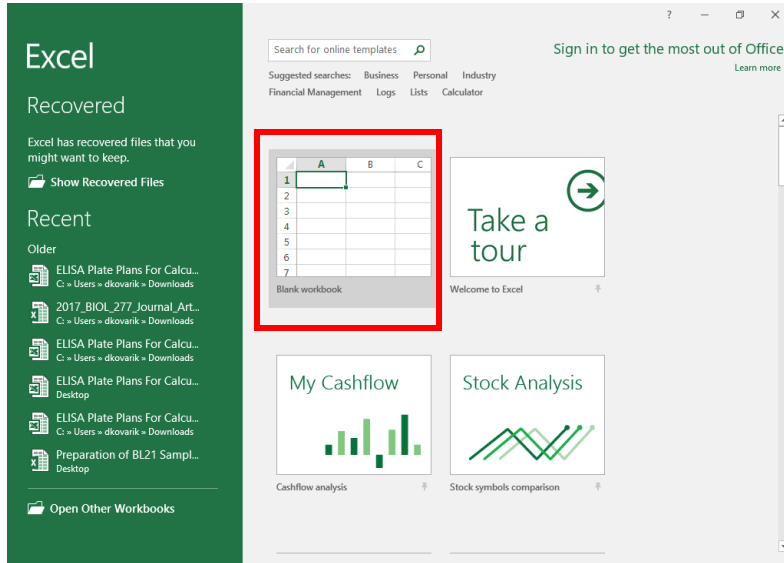
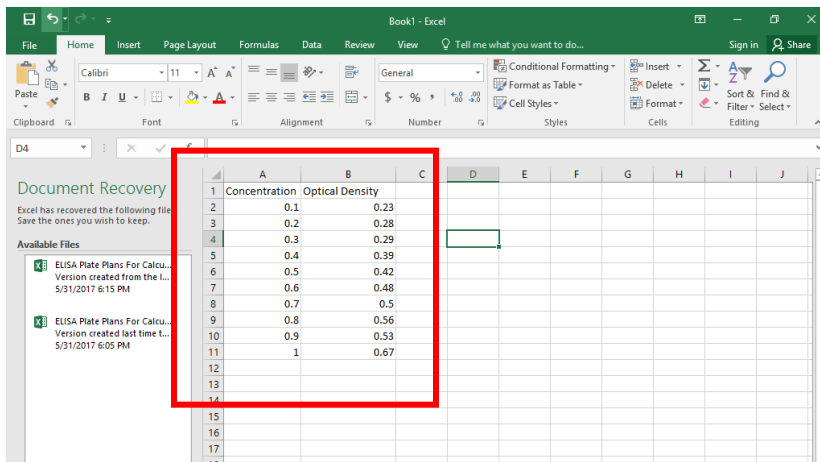


Using Excel to Create Standard Curves on PCs

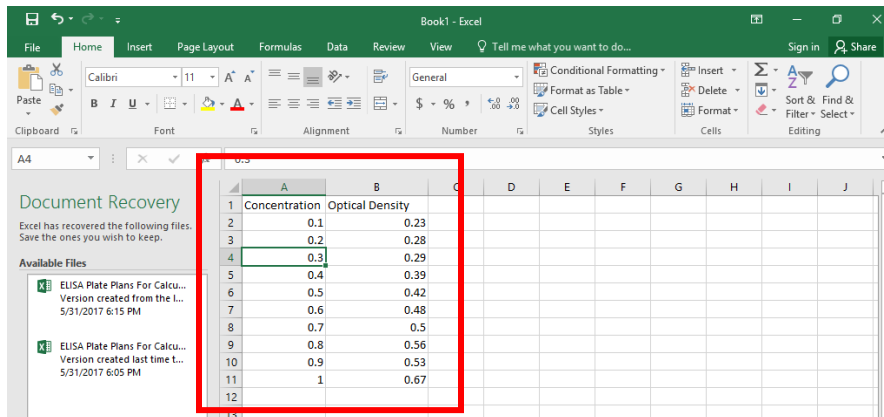
1) Open Excel 2016. Click “Blank Workbook”.



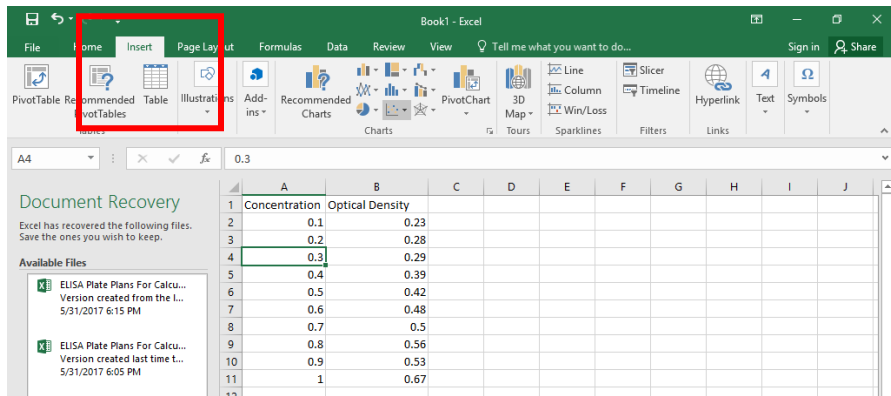
2) Input your data once the program has opened.



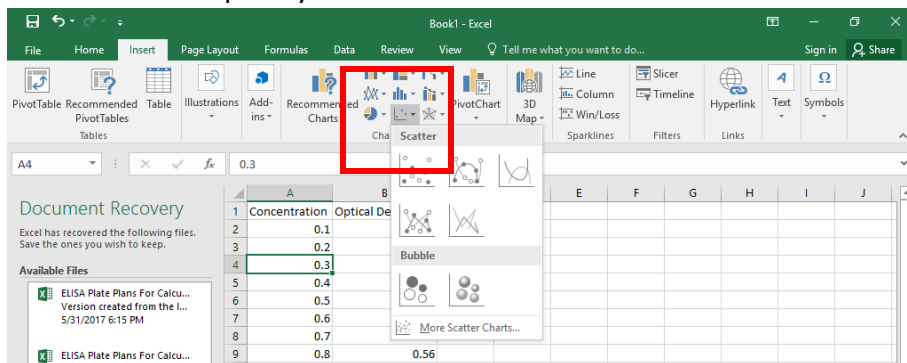
3) Click any box of data that you have just input.



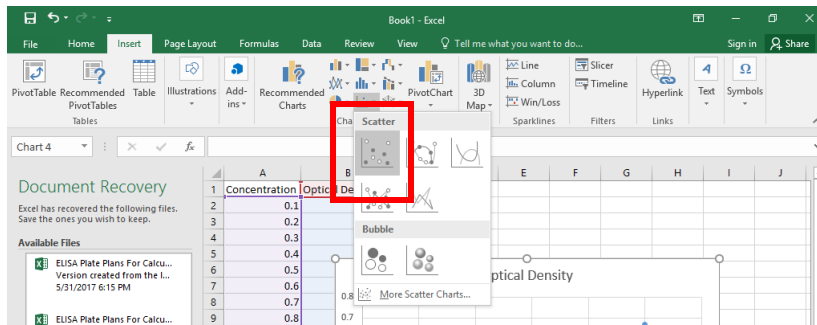
4) Select "Insert" on the upper bar.



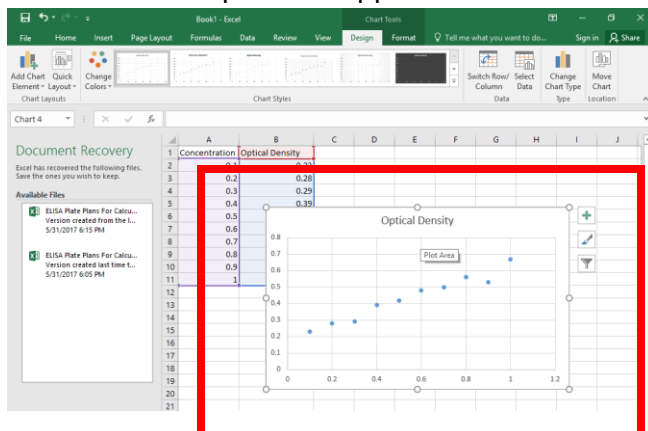
5) Click the Scatter plot symbol.



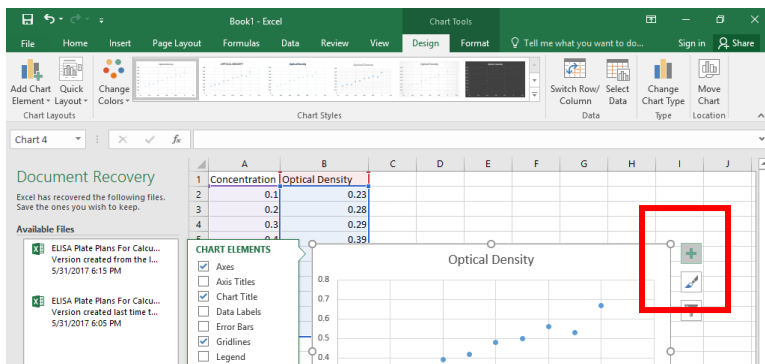
6) Click the picture with filled and unfilled circles with no lines.



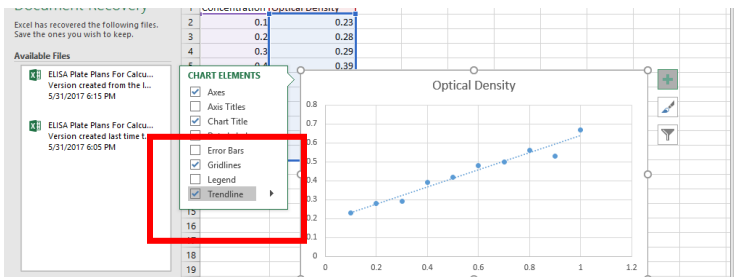
7) Click the scatter plot that appears.



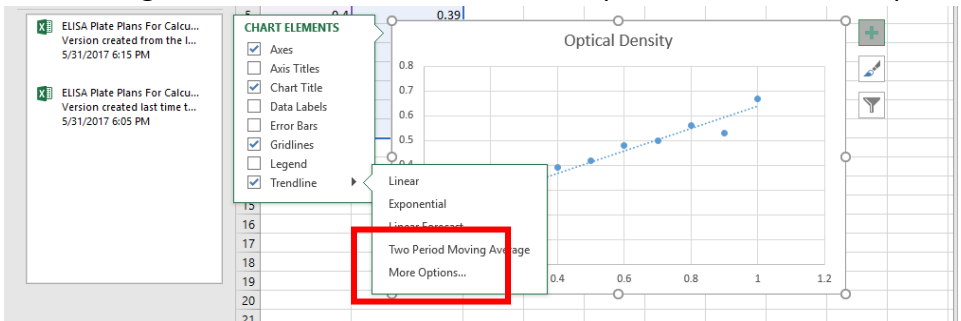
8) Click the plus symbol next to the top right corner of the graph.



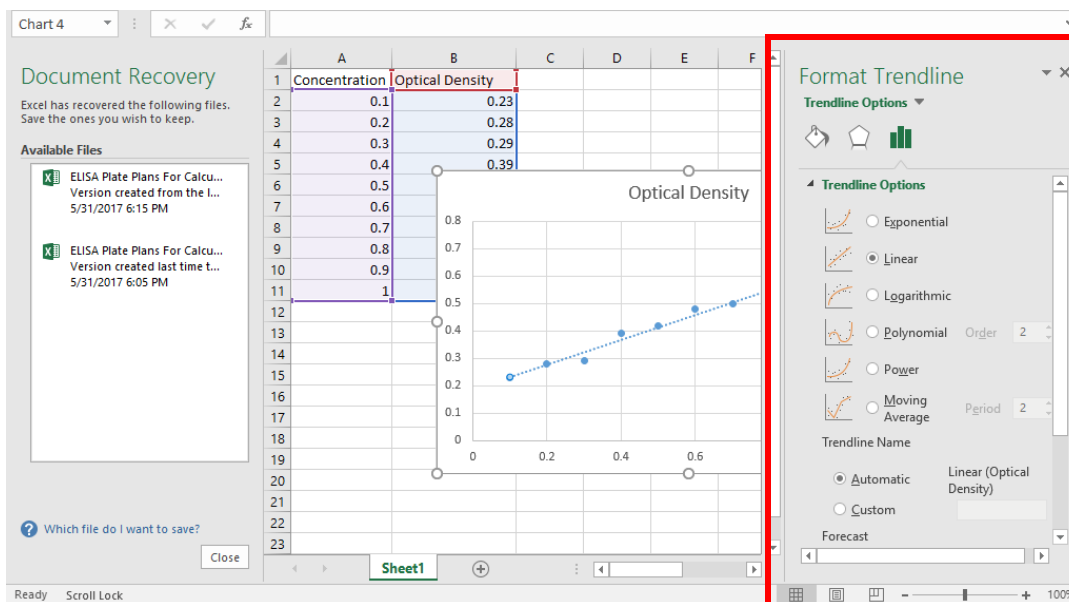
9) Click the checkmark for "Trendline".



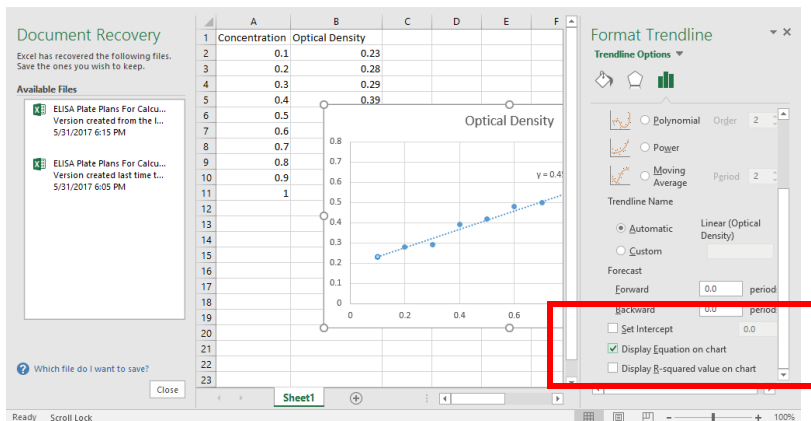
10) Click the right arrow, and then select "More Options..." from the drop down menu.



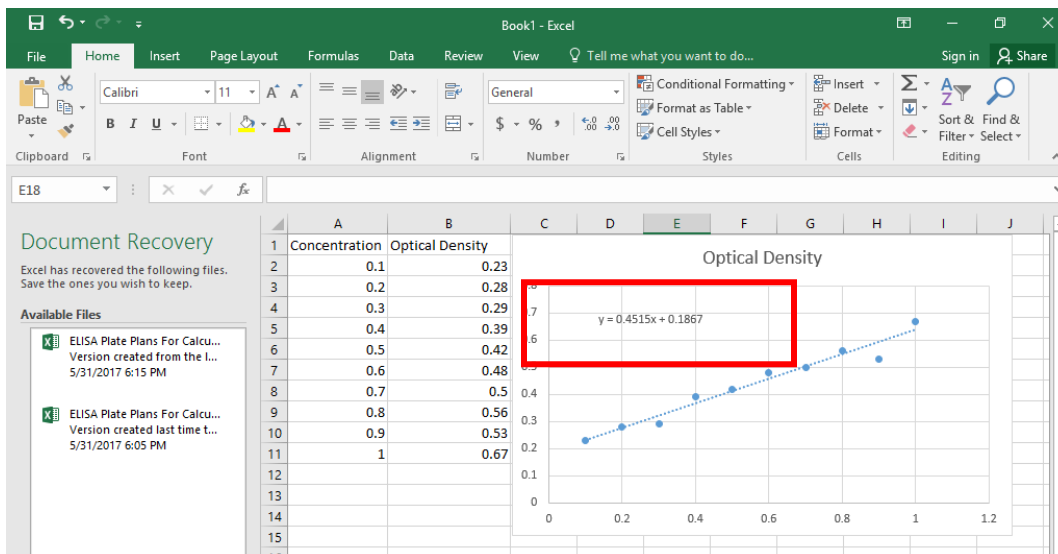
11) A "Format Trendline" window should open.



- 12) Scroll down in the opened “Format Trendline” window and click the “Display Equation on Chart” checkbox.



- 13) Close the “Format Trendline” window.
- 14) There should be an equation in the format $y = mx + b$ next to your data. This is the linear regression equation generated from the data in your standard curve. In the example below, the equation is: $y = 0.4515x + 0.1867$. You can move the equation around along with the graph to a location that is easy to read.



- 15) Select a value from your unknowns that is within the **linear range** of your standard curve data. This is usually in the ‘middle’ of your data values.
- 16) Use the selected unknown value as your Y value (optical density) and use the equation to solve for X (the concentration of your unknown).