

How to Do:

## Basics with Excel

Brief instruction:

This Excel crash course will include the raw basics and an introduction on how to create and use charts. Excel and other spreadsheet based programs do have a lot in common and work a lot with icons and graphical support. They are built to be user-friendly while offering a wide variety of tools to analyse and display your data. For questions and further material please go to the official support sites or community based help-forums.

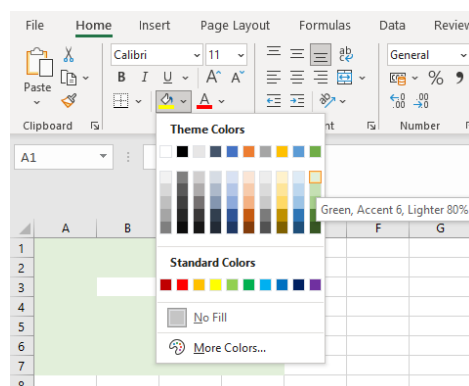
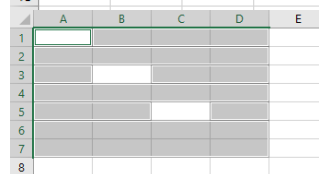
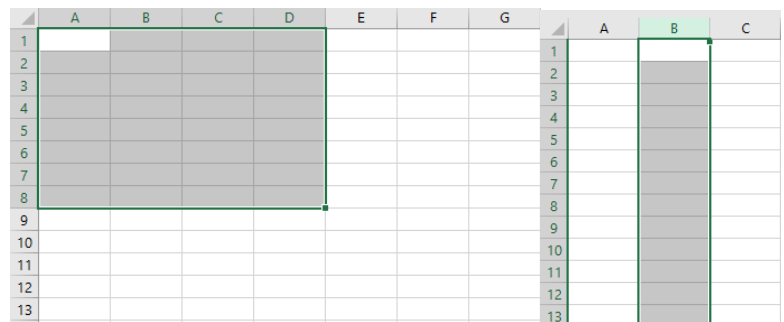
Note: if you do not have Excel yourself, you can get it based on a Campus License from the University of Potsdam. See [here](#) for instructions.

### Basics – Cell Formatting

- There are several ways you can select data:
  - Click on the first cell and drag to last or press “shift”, click on the last cell
  - Click on the numbers on the right or letters at top to select entire row / column
 Deselect cells by holding “ctrl” and clicking respective cells

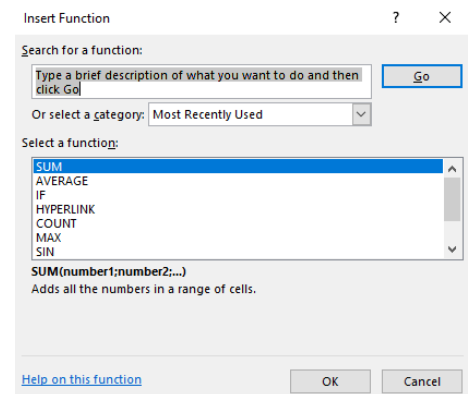
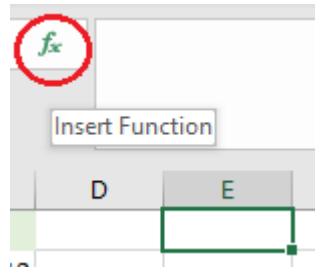
Note: selected cells a darker then non selected cells

- Once selection you can e.g. color your data, or select border sizes

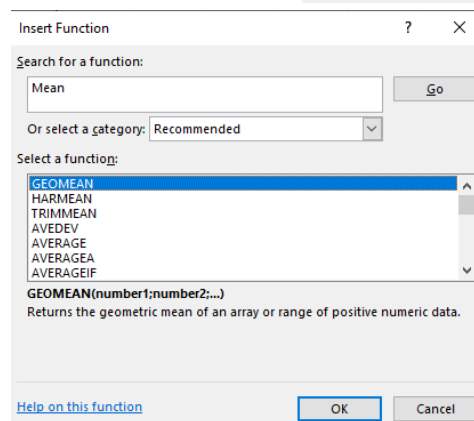


## Basics – Basic Functions

- Excel has several functions that can be used to calculate given data. Choose an empty cell, click on the  $f_x$  to see function Excel offers



- Search for a specific function by either description or operations



- (example) Calculate the average. Search for average (2.) and choose the cells you want to know the average from by clicking on the arrow

	A	B	C	D	E	F
1	Module	Grades	LP			
2	A	1.0	12			
3	B	1.3	6			
4	C	1.7	3			
5	D	3.0	3			
6	E	3.0	6			
7	F	4.0	3			
8	G	3.2	3			
9	H	3.00	3			
10	Average	=AVERAGE(B2:B9)				

- (example) observe that if you change a value in chosen cells the average is updated

	A	B		A	B
1	Module	Grades	1	Module	Grades
2	A	1.0	2	A	1.0
3	B	1.3	3	B	1.3
4	C	1.7	4	C	1.7
5	D	3.0	5	D	3.0
6	E	3.0	6	E	1.0
7	F	4.0	7	F	4.0
8	G	3.2	8	G	3.2
9	H	3.00	9	H	3.00
10	Average	2.5	10	Average	2.3

- You can also specify your own functions/ sequence of operations. Here you click on a cell and type in “=”

	A	B
4	C	1.7
5	D	3.0
6	E	1.0
7	F	4.0
8	G	3.2
9	H	3.00
10	Average	2.3
11	weighted Average	=

- Whenever you are in a cell that starts with “=” you can click on other cells to select that value for operations. Note: you can also select ranges of cells (click and drag)

The screenshot shows the Excel ribbon with the 'Formulas' tab active. The formula bar displays the formula  $=SUMPRODUCT(B2:B9;C2:C9)/SUM(C2:C9)$ . Below the ribbon, a spreadsheet is visible with columns A through H and rows 1 through 11. The data in the spreadsheet is as follows:

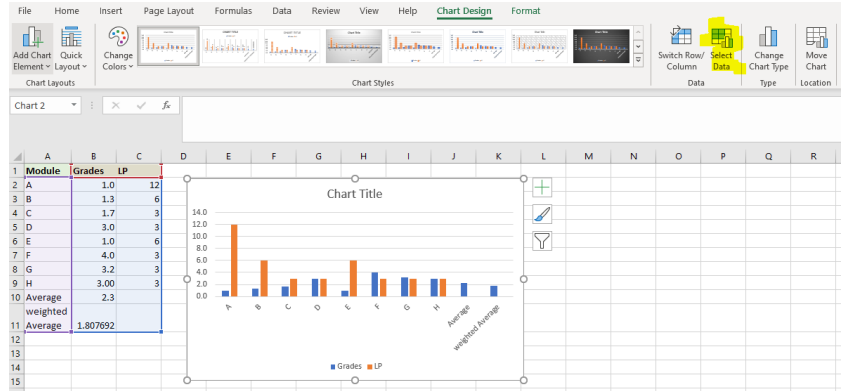
	A	B	C	D	E	F	G	H
1	Module	Grades	UP					
2	A	1.0	12					
3	B	1.3	6					
4	C	1.7	3					
5	D	3.0	3					
6	E	1.0	6					
7	F	4.0	3					
8	G	3.2	3					
9	H	3.00	3					
10	Average	2.3						
11	weighted Average	1.807692						

## Charts

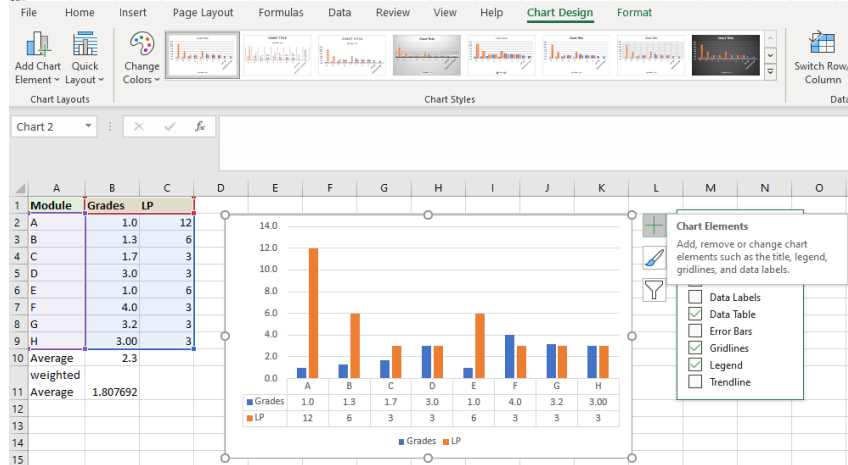
- Click on the “Insert” tab at the top of the window
- Go to „Charts“ and choose a chart category and a specific plot

The screenshot shows the Excel ribbon with the 'Insert' tab active. The 'Charts' group is visible, containing icons for 'Recommended Charts', 'Maps', and 'PivotChart'. The ribbon also shows 'AutoSave' (Off), 'Book1 - Excel', and a search bar.

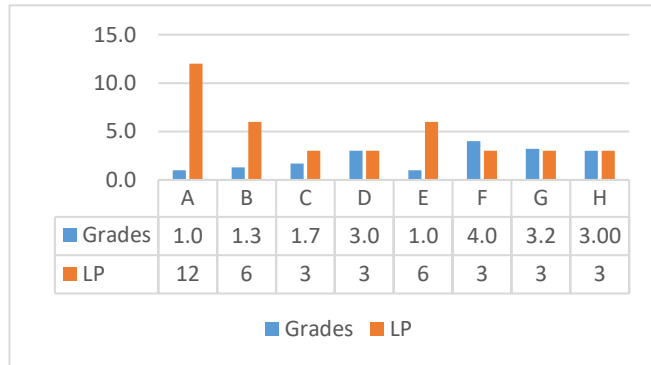
- Click on „Select Data“ to choose the data you want to add (Note that Excel may assume which data and how you want to plot this – this does not necessarily be the best or even right option, as shown here)



- (optional) To format the chart, click on “Add Chart Element” and choose the wanted element (Note: you can individually edit every added chart element)



- To export charts or plots to Word or PowerPoint click on the item and copy/paste



This was copy/pasted!