

LESSON HANDOUT

Applying and interpreting descriptive statistics in Excel

Why

Descriptive statistics will help you:

- Understand the nature of your data set
- Direct your analysis
- Describe your results

Using Formulas in Excel

- A **formula** is an expression which calculates the value of a cell/cells
- Formulas start with an = then the formula name, then the conditions within brackets ()

Formula	Definition Components	Expression which calculates the value of a cell/ cells			
		=	Name	(Values or Cells , Conditions)

Count function

Why: Allows you to gain a quick answer to the question - how many values are like this?

What: Count function finds the number of values which mean a certain condition in a selection.

Structure: =COUNT(Range of cells to count)

- **COUNT** - counts the number of cells with numerical values
 - Example: =COUNT(12, 5, 3, "three") will return 3
- **COUNTA** - Counts the number of filled cells
 - Example: =COUNTA(12, 5, 3, "three") will return 4
- **COUNTBLANK** - Counts the number of blank cells

Basic descriptive statistics functions

- **AVG** - Returns the **average** or mean of a selection
 - = AVG (Selection of cells to average)
- **MEDIAN** - Returns the **median** value from a selection
 - = MEDIAN (Selection of cells from which to find the median)
- **MODE** - Returns the **mode** from a selection
 - = MODE (Selection of cells from which to find the mode)
- **MAX** - Returns the **highest** cell value in a selection
 - = MAX (Selection)
- **MIN** - Returns the **lowest** cell value from a selection
 - = MIN (selection)
- **RANGE** - Returns the difference between the MAX and MIN value
 - = (MAX value - MIN value)