Studying Mathematics - Advice

Before the start of your course, it is useful to find out as much as you can from your tutors about the mathematics content you will encounter in your course. You may be surprised (pleasantly, hopefully) to find out that there is a greater amount of mathematics that you will encounter than you previously imagined.

Familiarize yourself with as much material as you are able, it will make for smoother term-time study of material in which you will make use of mathematics.

This handout aims to provide useful information related to aspects of basic algebra as well as basic statistics, which may be useful in your studies. The handout outlines potentially useful learning objectives in these areas.

Regarding basic algebra, the following learning objectives are potentially useful to keep in mind:

- Ability to open brackets in algebraic expressions
- Ability to factorise algebraic expressions
- Ability to perform addition, subtraction, multiplication and division operations where fractions are involved
- Ability to write down equivalent fractions, in particular express given fractions as percentages
- Ability to solve simple linear equations
- Ability to solve simple problems involving inequalities
- Gain familiarity with basic functions and their graphs
- Gain familiarity with calculator functions.

Regarding basic statistics, the following learning objectives are potentially useful to keep in mind:

- Understand how to identify grouped, as well as ungrouped numerical data
- Understand how to calculate (or estimate) the mean, median and mode for simple numerical data sets (grouped and ungrouped)
- Understand how to calculate (or estimate) the range, interquartile range, standard deviation and variance for simple numerical data sets (grouped and ungrouped).

Useful online resources for your studies include:

- The Khan Academy - www.khanacademy.org
- Maths Is Fun - www.mathsisfun.com

Help in a variety of topics in mathematics is also available from the Academic Support service; please send an email to maths.support@uwl.ac.uk for further details. Good luck in your studies.