

## Unit Guide

<b>Unit Title</b>	Quantitative Literacy
<b>Level</b>	One
<b>Reference No. (showing level)</b>	IAF-1-191
<b>Credit Value</b>	15 CAT points
<b>Student Study Hours</b>	Contact hours: 48 Student managed learning hours: 102
<b>Pre-requisite learning</b>	None
<b>Co-requisites</b>	None
<b>Excluded combinations</b>	None
<b>Unit co-ordinator</b>	Les Norman
<b>Faculty/Department</b>	BCIM/MSFS
<b>Short Description</b>	The Unit examines a range of ways of handling, analysing and presenting numerical information. The underlying theme is to look at numerical data in a variety of forms, to determine the 'story' that this data is telling and to tell that 'story' to others.
<b>Aims</b>	<p>The main aim of the Unit is to equip students with the quantitative skills necessary for them to be able to understand, analyse and communicate to others the information contained in numerical data. This will include a revision of some of the basic mathematical concepts involved in any study of quantitative methods.</p> <p>All aspects of business involve dealing with numerical information presented in a variety of formats. The Unit aims to give students the tools to handle such information appropriately and with confidence.</p>
<b>Learning Outcomes</b>	<p><b>Knowledge and Understanding:</b> The quantitative skills necessary for them to be able to understand, analyse and communicate to others the information contained in numerical data.</p> <p><b>Intellectual Skills:</b> The ability to synthesis methods of data presentation</p> <p><b>Practical Skills:</b> The ability to handle all type of data.</p> <p><b>Transferable Skills:</b> The numeracy skills are applicable to all units and all applications of business.</p>
<b>Employability</b>	The main aim of the Unit is to equip students with the quantitative skills necessary for them to be able to understand, analyse and communicate to others the information contained in numerical data. This will include a revision of some of the basic mathematical concepts involved in any study of quantitative methods.

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<p><b>Teaching and learning pattern</b></p>	<p>The unit is taught by a series of 'workshops' which are a mixture of formal lectures together with the opportunity for students to practice the various techniques introduced. During the taught sessions academic staff will be available to give assistance to individual students if and when required. It is essential that students complete all the exercises set during their private study time. <b>Success will not be achieved</b> in this Unit just by reading about the subject. <b>Success will only come</b> from repeated practice of the techniques involved.</p>
<p><b>Indicative content</b></p>	<p><b>Index numbers</b> – fixed and chained based indices. Laspeyres and Paasche Indices.</p> <p><b>Time Series Analysis</b> –using the additive model, of trend figures and seasonal factors. Deseasonalisation and forecasting of data.</p> <p><b>Classification of data</b> – grouped frequency distribution. Histogram and cumulative frequency polygon (ogive).</p> <p><b>Measures of locations and dispersion</b> – mean, median variance, standard deviation and inter-quartile range.</p> <p><b>Bivariate data</b> – scatter diagrams. Calculation of the product moment correlation coefficient. Least squares regression line and its use in forecasting</p> <p><b>Normal Distribution</b> – standard normal tables and standardisation. Solution of simple problems involving non-standard normal variables including the construction of confidence limits. Introduction to inferential statistics using 1 sample tests for a mean and a proportion</p> <p><b>Time value of money</b> – compound interest, NPV &amp; IRR</p>
<p><b>Assessment Elements &amp; weightings</b></p>	<p>The assessment will comprise 2 components:-</p> <ol style="list-style-type: none"> <li>1. A timed constrained assignment in Session 8 covering the material introduced in Sessions 1 – 6. This will be open book and will contribute up to 50% of the final mark.</li> <li>2. A timed constrained assignment in Session 13 covering the material introduced in Sessions 7 &amp; 9 - 12. This will be open book and will contribute up to 50% of the final mark.</li> <li>3. To satisfy the examiners candidates must normally achieve an overall mark of 40%. A minimum mark of 30% will be required for each of the two elements above.</li> </ol>

<p><b>Indicative Sources</b> <i>(Reading lists)</i></p>	<p>Students do not need to purchase a core text book. All course materials are available on CD-ROM which will be given to each student during the lecture programme. However, the following books may be useful for reference purposes:</p> <p>Claire Morris      Quantitative Approaches in Business Studies (6<sup>th</sup> Edition), Prentice Hall, 2003</p> <p>Glyn Burton et al    Quantitative Methods for Business &amp; Economics Prentice Hall, 2002</p> <p>Andre Francis      Business Mathematics and Statistics (6<sup>th</sup> Edition) Thomson, 2004</p> <p>Sonia Taylor        Business Statistics Palgrave, Hall, 2001</p>
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