

Credits	20
Contact time	52
Pre-requisites	None
Acceptable for	All
Excluded combinations	None
Core/Optional	Core
Module Tutor	Mr. Edgar Bacason

Description & Aims

This module is designed to introduce the use and interpretation of kind of numbers useful to business. As a result, it is of value to students of Business and Management; students taking other subjects that rely on quantitative data may also find this module beneficial. This introductory module assumes a basic level of mathematics as a starting point. Working with data is important in other year 1 modules, for example Organizations and the Business Environment, and Economics. In addition, these analytical skills are applied in advanced level modules such as Accounting, Managing Sustainability, and Management Accounting. The acquisition of advanced spread sheet skills, which have direct applications in business, will be a feature of this module.

Outline Syllabus & Teaching & Learning Methods

The module will cover some of the most useful numeric tools used in business. These will include: collecting, presenting, and summarizing data; probability and expected value models; the normal distribution and confidence intervals; financial models including interest, net present value, and IRR; linear programming; correlation and regression; index numbers; time based forecasting models; and computer workshop sessions which will be used to teach you to use the power of computers to reach solutions to numeric problems, and extend and develop your ability in using Excel.

All of the above will be placed into the context of the business/economic world, and you will learn how different sorts of numbers are used to make business and financial decisions. Teaching will include lectures, seminars and workshops. Lecture 1 hour and workshop 1 hour and Seminar 2 hours.

Intended Learning Outcomes	How assessed
<p>Personal development:</p> <p>On completion of this module you will have:</p> <ul style="list-style-type: none"> ▪ effective problem solving and decision making using appropriate quantitative and qualitative skills ▪ numeric and quantitative skills including data analysis, interpretation, and extrapolation effective use of Information & Communication Technology (ICT) for business applications <p>Knowledge:</p> <p>You will know how to:</p> <ul style="list-style-type: none"> ▪ organize and present data clearly; ▪ describe different types of relationships between variables and interpret the meaning of linear regression and correlation. ▪ describe and explain the importance of typical probability distributions. ▪ make correct use of significance tests ▪ use and interpret index numbers and time series ▪ demonstrate competence in the use of spreadsheets 	<p>Assessed Seminars where marks are accumulated every week.</p> <p>Alternative Exam</p>

Assessment Scheme	Weighting %
Assessed Seminar (ongoing basis)	50%
Alternative Exam (19 th January, 2023)	50%
Reading Lists/Key Texts & Websites	
<p>Anderson, D R., Sweeney, D J., & Williams, T A. (2014) <i>Essentials of Modern Business Statistics with Microsoft Office Excel</i>. 6th Edition: Cengage Learning</p> <p>Smailes J & McGrane A (2000) <i>Essential Business Statistics</i> Financial Times Prentice Hall</p> <p>Whigham D (2008) <i>Business Data Analysis Using Excel</i> Oxford University Press</p>	
Learning Resources	
Study Lab, computers, and online statistical data, Reuters Eikon	

INTENDED LEARNING OUTCOMES

EMPLOYABILITY OPPORTUNITIES, ETC.

Employers want students who can ***do***; not ones who have 'merely' spent three years reading for their degree. This means that a successful graduate will have personal transferrable skills – 'soft skills' – that can be ***evidenced***.

On this module, you will enhance the core 'academic' skills (of, for instance, analysis, argument, synthesis, organisation, and written skills) as well as employability skills like advanced numeracy, statistical analysis for business, the use of common 'Office' suite programs (like Word and Excel) and group/team-working.

RESOURCES

SET TEXTS AND SECONDARY READING

Core textbook

Anderson, D R., Sweeney, D J., & Williams, T A. (2014) *Essentials of Modern Business Statistics with Microsoft Office Excel*. 6th Edition: Cengage Learning

Where to buy your textbook

The core text is available from many retailers including Cengage directly, high street booksellers and online retailers like www.amazon.co.uk. You might also be able to source second-hand copies (a sensible choice given that the textbook is getting a little old now, and there are plenty to choose from).

Other useful textbooks

Smailes J & McGrane A (2000) *Essential Business Statistics* Financial Times Prentice Hall

WHIGHAM, D. (2007), ***BUSINESS DATA ANALYSIS USING EXCEL***, OXFORD

ROWE, N. (2002), ***REFRESHER IN BASIC MATHEMATICS***, CONTINUUM

If you feel that you need to brush up on your mathematics then Nick Rowe's book is *really* student friendly, with clear demonstrations of how to tackle problems. It is a short text and goes directly to point without spending time on theoretical aspects of maths.

Other sources

- Curwin, J. and Slater, R. (2000), *Improve Your Maths: A refresher course*, Business Press (Thompson Learning)
- Graham, A. (1994), *Teach Yourself Statistics*, Hodder & Stoughton
- Graham, A. (1990), *Investigating Statistics: A Beginner's Guide*, Hodder & Stoughton
- Hackett, G. & Caunt, D. (1994), *Quantitative Methods*, Blackwell Business
- Hackett, G. & Luffrum, P. (1999), *Business Decision Analysis*, Blackwell Business
- Robson, A. J. (1999), *Introductory Business Statistics with Microsoft Excel*, Business Education Publishers
- Bernstein, P. L. (1996), *Against the Gods*, Wiley
- Huff, D. (1958), *How to Lie With Statistics*, Penguin
- Paulos, J. A. (1988), *Innumeracy: Mathematical Illiteracy and its Consequences*, Penguin

The **internet** is a rich source of business information. Try looking up the [Lynda.com](http://www.lynda.com) for a range of useful materials and consult the *Essential Business Statistics* Companion Web Site <http://www.booksites.net/smailesmcgrane>. *There is also plenty of material available via simple google searches (remember - less is more; search using key words only) and on YouTube (but please carefully screen before use).*

STUDY LAB AND OTHER ONLINE RESOURCES

STUDY LAB is used extensively on the module to make announcements, post relevant information, distribute data, collect feedback and assessment submissions, etc. It is essential that you learn to use Study Lab as soon as possible, as it will be integral to your studies.

Other online resources will be made known to you as the course progresses, where these are relevant to your studies.