

## Liverpool John Moores University

Title: Data Analysis for Business  
Status: Definitive  
Code: **4701SERCBM** (128199)  
Version Start Date: 01-08-2021

Owning School/Faculty: Business and Management  
Teaching School/Faculty: South Eastern Regional College

Team	Leader
Karl Harper	Y

**Academic Level:** FHEQ4  
**Credit Value:** 10  
**Total Delivered Hours:** 44  
**Total Learning Hours:** 100  
**Private Study:** 56

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	11
Workshop	33

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	Port	Portfolio based case Study	100	

### Aims

*This module provides an introduction to key numerical techniques used in the business world to aid decision making.  
It aims to provide the mathematical and statistical foundations that are necessary in any area of business.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Describe a range of analytical and diagnostic quantitative methods and tools to aid decision making in business.
- 2 Summarise quantitative data using packages such as Excel and SPSS.
- 3 Recognise the importance of using spreadsheets and other statistical software for the purposes of problem solving.
- 4 Summarise information from a questionnaire within a business case study context.

### **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

Case Study	1	2	3	4
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### **Outline Syllabus**

- *Revision of mathematics (number operations, decimals/fractions/percentages, power and roots, etc.)*
- *Simple and compound interest, discounting, present value:*
- *Continuous compound interest rates;*
- *Introduction to repayment schemes (annuities and other financial instruments).*
- *Introduction to Probability:*
- *Measuring uncertainty; random variables;*
- *Conditional probability and independence;*
- *Discrete distributions (Binomial, Poisson);*
- *Continuous distributions (the Normal).*
- *Estimation and confidence intervals;*
- *Hypothesis testing (inferences on means and proportions);*
- *Correlation;*
- *Simple regression analysis*

### **Learning Activities**

Formal lectures and workshops.

### **Notes**

This module provides an introduction to mathematical and statistical techniques required for the study of business.