

Liverpool John Moores University

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Title: Business Mathematics & Statistics
Status: Definitive
Code: **4501AFYPC** (123177)
Version Start Date: 01-08-2021

Owning School/Faculty: Business and Management
Teaching School/Faculty: YPC International College (Kolej Antarabangsa YPC)

Team	Leader
James Fraser	Y

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 46
Total Learning Hours: 200 **Private Study:** 154

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Workshop	44

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	AS1	Diagnostic Test	20	
Exam	AS2	Closed Book Examination	80	2

Aims

1. To introduce different data types and the approaches required for analysis.
2. To enable the student to appreciate the role of statistical and mathematical methods in a business environment.
3. To develop an awareness of the scope and limitations of quantitative analysis.
4. To enable the student to formulate and evaluate problems.
5. To facilitate basic forecasting and hypothesis testing for data sets.

6. To develop student skills in linear programming techniques.
7. To use computer packages for data analysis.

Learning Outcomes

After completing the module the student should be able to:

- 1 Calculate a range of basic financial measures.
- 2 Identify different data types, manipulate data and carry out simple statistical analysis including presenting data using appropriate graphs.
- 3 Calculate and use various location and dispersion measures, and explore data to enable decision making for example use of linear programming to optimize use of resources.
- 4 Undertake analysis of data including simple forecast of bivariate data and, interpreting hypotheses using suitable significance tests.

Learning Outcomes of Assessments

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

Diagnostic Test	1			
Closed Book Examination	1	2	3	4

Outline Syllabus

Calculate a range of basic financial measures.
Introduction to data types, primary and secondary data sources, data presentation.
Measures of location and dispersion and their uses.
Confidence intervals, simple hypothesis tests.
Regression and correlation.
Probability.
Financial mathematics, compounding, discounting and investment appraisal.
Linear programming.
Index numbers.
Use of the Excel computer package.

Learning Activities

Weekly workshops with individual/group activities and private study.

Notes

This module introduces basic mathematical and statistical concepts and relates them to business and accounting situations and provides a foundation for further studies in business and finance.

The test is a diagnostic assessment; whilst the examination is the terminal

summative assessment.