

Liverpool John Moores University

Title: DATA INTERPRETATION
Status: Definitive
Code: **4501AE** (107271)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Isle of Man International Business School

Team	Leader
Alex Watt	Y

Academic Level: FHEQ4 **Credit Value:** 12.00 **Total Delivered Hours:** 27.00
Total Learning Hours: 120 **Private Study:** 93

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	13.000
Tutorial	13.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	1500-2000 word report and presentation of an analysis of data.	50.0	
Exam	AS2	Unseen examination.	50.0	1.00

Aims

1. To introduce students to different types of business data and some of the approaches adopted for their subsequent analysis.
2. To enable students to explore data using spreadsheets and the statistical facilities in Excel.
3. To introduce students to describing, exploring and analysing data.
4. To enable students to realise the role of statistical inference, including estimation of population parameters on the basis of sample statistics.

5. To enable students to formulate and evaluate problems concerning hypotheses using a combination of theory and statistics packages.
6. To develop students' awareness of the interpretation of patterns and trends in data.

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify different data types, manipulate data and facilitate a simple statistical analysis.
- 2 Present data using appropriate tabular and graphical methods.
- 3 Obtain and use location and dispersion measures and explore data, to enable decision making.
- 4 Recognise the scope and range of modern statistics packages, to facilitate data analysis and enable more efficient statistical report writing.
- 5 Understand the ways of interpreting and evaluating probabilities.
- 6 Estimate population parameters using sample statistics.
- 7 Formulate and interpret hypotheses using significance tests.
- 8 Investigate bivariate data.

Learning Outcomes of Assessments

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

ESSAY	1	2	3		
EXAM	4	5	6	7	8

Outline Syllabus

1. Price indices and deflation.
2. Ways of presenting data.
3. Location and dispersion measures and their uses.
4. Probability.
5. Introduction to confidence intervals and hypothesis testing with interpretation of significance.
6. Extension of hypothesis testing to Chi-Square tests.
7. Introduction to correlation and regression.

Learning Activities

Topics will be introduced in a lecture together with related exercises undertaken in a follow up tutorial. On occasion, tutorial sessions will be held in an IT Suite. In addition students will be directed to relevant sections of the course text for supplementary private study.

References

Course Material	Book
Author	Oakshott, L
Publishing Year	2009
Title	Essential Quantitative Methods for Business, Management and Finance
Subtitle	
Edition	
Publisher	4th edition, Basingstoke, Palgrave Macmillan
ISBN	

Notes

From an early stage students are encouraged to start work on the assignment, researching background material and analysing the given data sets. The majority of the course is devoted to probability and statistical inference with the emphasis being on the ideas and applicable methods.