Liverpool John Moores University

Title:	PURE MATHS 1
Status:	Definitive
Code:	**3502IFYSP** (107124)
Version Start Date:	01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Liverpool Business School

Team	emplid	Leader
Elizabeth Thompson		Y

Academic Level:	FHEQ3	**Credit Value:**	12.00	**Total Delivered Hours:**	69.00
Total Learning Hours:	120	**Private Study:**	51		

Delivery Options
Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	66.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Module Examination	100.0	3.00

Aims

To provide students with a basic knowledge of mathematics relevant to first degree programmes and to prepare for the development of mathematical applications in science and engineering.

Learning Outcomes

After completing the module the student should be able to:

1   Use mathematical notation, terminology, conventions and units correctly.

2   Interpret in mathematical terms verbal, graphical and tabular information.
3   Manipulate mathematical expressions.
4   Apply mathematical methods and techniques.
5   Make inferences from mathematical interpretations.

Learning Outcomes of Assessments

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

EXAM   1 2 3 4 5

Outline Syllabus

1. Algebra including Rational and Irrational Functions, Simultaneous and quadratic equations, Remainder theorem, Binomial theorem for positive indices, Indices and logarithms, Arithmetic and geometric series, Curve sketching and Functions.
2. Co-ordinate Geometry, including points, lines and areas.
3. Trigonometry, including Cosine and Sine rules, Identities, Solving trigonometric equations.
4. Differentiation.
5. Integration.
6. Handling Data, including Frequency distributions, histograms, mean, median and mode, quartiles, variance and standard deviation.

Learning Activities

Explanatory lessons to and working examples with small classes, regular formative assignments, class tests and terminal module examination.

References

Course Material	Book
Author	Bostock, L and Chandler, S
Publishing Year	2000
Title	Core Mathematics for Advanced Level
Subtitle	
Edition	3rd edition
Publisher	Nelson Thornes Ltd.
ISBN	9780748755097

Notes

This module develops the mathematical knowledge and practical skills of the students beyond the level reached in their High School studies and prepares them for the demands of many first degrees, particularly those in Science. With Pure

Mathematics 2 this module helps in the preparation of students wanting Engineering subjects at degree level.

Summative assessment is realized through the final module examination but formative assessment occurs throughout the course through regular homework assignments and class tests.