

Liverpool John Moores University

Title: PURE MATHEMATICS 2
Status: Definitive
Code: **3005BELEN** (101131)
Version Start Date: 01-08-2011

Owning School/Faculty: Arts, Professional and Social Studies
Teaching School/Faculty: Bellerby's College - Brighton

Team	Leader
Jarmila Hickman	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: Standard Year Long

Component	Contact Hours
Lecture	66.000

Grading Basis: 40 %

Assessment Details

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

Aims

To build on the basic knowledge gained through the study of Pure Mathematics 1 with the further development of methods and techniques applicable to Science and Engineering degree programmes.

Learning Outcomes

After completing the module the student should be able to:

- 1 Recognise and select mathematical methods suitable for the solution of problems.

- 2 Make logical deductions in the context of problem-solving.
- 3 Select and apply appropriate techniques to problems in unfamiliar situations.
- 4 Draw upon knowledge, understanding and skills acquired in the module, Pure Mathematics 1.

Learning Outcomes of Assessments

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

EXAM 1 2 3 4

Outline Syllabus

- 1. Algebra, including Partial fractions, Curve sketching, Co-ordinate Geometry – the circle.
- 2. Trigonometry – all 6 functions and the relationships between them, Proving identities, Solving equations, Radian measure, arc length and area.
- 3. Differentiation, including products and quotients, trigonometric functions, Implicit and parametric functions.
- 4. Integration using trigonometric identities, by substitution, partial fractions and by parts.
- 5. Numerical methods.
- 6. Vectors in 2 and 3 dimensions.

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 builds on Pure Mathematics 1 to deepen the knowledge, understanding and skills level of students in key areas relevant to both Science and Engineering

degrees.

Summative assessment is realized through the terminal module examination, while formative assessment takes place throughout the course through the setting of regular homework assignments and class tests.