

Liverpool John Moores University

Title: Maths for Science
Status: Definitive
Code: **3514IFYSP** (119752)
Version Start Date: 01-08-2017

Owning School/Faculty: Academic Portfolio
Teaching School/Faculty: Academic Portfolio

Team	Leader
Kamila Tomczak	Y

Academic Level: FHEQ3
Credit Value: 12
Total Delivered Hours: 61.5
Total Learning Hours: 120
Private Study: 58.5

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	20
Seminar	10
Tutorial	10
Workshop	20

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	750 word report	40	
Exam	AS2	Exam	60	1.5

Aims

To provide international students with an understanding of mathematics in preparation for progression to UK first degree programmes in Science.

To develop skill in mathematical application, method and technique.

To develop independent study skills in preparation for progression to Science programmes.

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 Apply mathematical methods and techniques to scientific concepts.
- 4 Recognise and select mathematical methods suitable for the solution of problems.

Learning Outcomes of Assessments

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

Reports	1	2
Exam	3	4

Outline Syllabus

Basic numeracy – factors, brackets, prime numbers, square numbers/roots, cube numbers/roots, SI units, decimal places, significant figures

Fractions and reciprocals – multiplying, dividing, adding, subtracting

Percentages

Powers

Approximation and errors – accuracy and precision

Introduction to graphs – using and recognising graphs, gradient of a graph

Exponential growth and decay

Simultaneous equations

Logarithms

Introductory statistics – describing data, standard deviation, correlation, regression

Learning Activities

Lectures and seminars will be a key part of learning within this module alongside workshops whereby students will continuously test their mathematical ability and its application to Science.

Notes

None