

## Liverpool John Moores University

Title: FURTHER PURE MATHS  
Status: Definitive faculty appr change  
Code: **6035PSM** (115976)  
Version Start Date: 01-08-2016  
  
Owning School/Faculty: Education  
Teaching School/Faculty: Education

Team	Leader
Philip Duggan	Y

**Academic Level:** FHEQ6      **Credit Value:** 24      **Total Delivered Hours:** 50  
**Total Learning Hours:** 240      **Private Study:** 190

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	50	2
Essay	AS2	Coursework - Written Task (4000 Words)	50	

### Aims

*To further extend students' knowledge and skill of particular mathematics useful for teaching at Key Stages 4 and 5 and to enable them to structure that knowledge in a meaningful way and apply it to a wide variety of situations.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Select and use appropriate mathematical techniques to solve synoptic problems in seen contexts.
- 2 Select and use appropriate mathematical techniques to solve synoptic problems in unseen contexts.
- 3 Demonstrate an ability to communicate their extended mathematical understanding to others.

### **Learning Outcomes of Assessments**

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

EXAM	1	
CW	2	3

### **Outline Syllabus**

*Complex numbers*

*Standard methods for the solution of first and second order differential equations*

*Matrices*

*Numerical methods of solution of differential equations*

*Applications of integration*

### **Learning Activities**

Students will engage in a variety of interactive lectures, workshops and seminars backed up by internet sessions and independent learning.

### **Notes**

In this module students will take forward their subject knowledge up to degree level in the field of differential equations and integration.