

Liverpool John Moores University

Title: Extending Primary Mathematics and Primary Science
Status: Definitive
Code: **6014PRIM** (117627)
Version Start Date: 01-08-2016

Owning School/Faculty: Education
Teaching School/Faculty: Education

Team	Leader
Deborah Pope	Y
Sarah Hindhaugh	

Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 75

Total Learning Hours: 240 **Private Study:** 165

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	75

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	Science		50	
Essay	Maths		50	

Aims

To refine students' knowledge and understanding of key scientific concepts, scientific enquiry skills and pedagogy associated with teaching the subject across the primary age range. To develop skills of critical analysis of pedagogical issues relating to primary science.

To extend student' understanding of key issues in primary mathematics education and allow them to critically evaluate current research in this area to inform their own practice.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a command of the pedagogical, content and professional knowledge and understanding for effective science teaching across the primary age and ability range.
- 2 Critically discuss pertinent issues impacting on science teaching and learning in the primary school.
- 3 Critically evaluate the extent to which research in mathematics education informs practice in the primary classroom.
- 4 Critically reflect upon what constitutes effective strategies for the learning and teaching of mathematics.

Learning Outcomes of Assessments

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

Essay	1	2
Essay	3	4

Outline Syllabus

Science (12 credits):

Scientific enquiry

Physical processes

Materials and their properties

Life processes and living things

Planning progressive units of work

Meeting children's needs in science

Formative and summative assessment in science

Identifying opportunities for learning in out-of-school contexts

Maintaining subject integrity in cross-curricular learning

Mathematics (12 credits)

further development of mathematical subject knowledge

development of calculation methods

problem solving approaches

APP

Research in mathematics education

Transition

Skills test

Mathematics out of school

Effective questioning

Learning Activities

The module will be taught through lectures, seminars, workshops, practicals and tutorials.

Notes

This module extends students' subject knowledge and pedagogical repertoire for the teaching of mathematics and science across the primary age phases and ability range.