

## Liverpool John Moores University

Title: HOW CHILDREN LEARN MATHEMATICS  
Status: Definitive  
Code: **6007EDSTUD** (104056)  
Version Start Date: 01-08-2016

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

Team	Leader
Derek Kassem	Y

**Academic Level:** FHEQ6  
**Credit Value:** 12  
**Total Delivered Hours:** 24  
**Total Learning Hours:** 120  
**Private Study:** 96

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	20
Off Site	4

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1		100	

### Aims

*To provide students with an understanding of the development of mathematical ideas in young people and how schools respond to their learning needs.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Describe and critically analyse how children develop an understanding of counting and number in the early and primary years.
- 2 Give a critical account of current research into children's understanding of number.
- 3 Describe and provide a critical account to current pedagogical approach to teaching mathematics in the primary classroom.

## **Learning Outcomes of Assessments**

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

Assignment 1	1	2	3
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## **Outline Syllabus**

*Early stages of counting - the psychology of learning mathematics language & mathematics, including children with EAL*

*National Numeracy Strategy and other Government initiatives*

*Teaching strategies in the primary classroom including:*

*\*Teaching & learning number*

*Research in children's understanding of number*

*Models of learning mathematics*

*Learning difficulties in mathematics, including:*

*\* Development of misconception in number*

*\* Dyslexia and mathematics*

*\* Individual approaches to calculation*

*Current issues in mathematics education appropriate to young children*

## **Learning Activities**

Lectures, school-based fieldwork and Blackboard activities/resources

## **Notes**

The module provides an insight into children's mathematical thinking starting in the nursery and throughout the primary phase. In particular it looks at differences between children's own ideas about mathematics and the 'formal' methods they meet in school. The module also provides an understanding of current curriculum policy and practice in schools, using international as well as UK examples