

Liverpool John Moores University

Title: Subject Pedagogy in Mathematics
Status: Definitive
Code: **6004ITT** (125006)
Version Start Date: 01-08-2021

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

Team	Leader
Paul Killen	Y

Academic Level: FHEQ6
Credit Value: 20
Total Delivered Hours: 40
Total Learning Hours: 200
Private Study: 160

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	35
Tutorial	2
Workshop	3

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	Chapter	3000 words	80	
Presentation	Presemnt	1000 words equivalence	20	

Aims

To enable students to have a critical understanding of the nature of mathematics education;
To enable students to analyse how mathematics is taught in the 11-18 sector;
To enable students to investigate the development of learners' understanding and barriers to learning in mathematics;

To enable students to critically evaluate strategies to enable learning in mathematics;

Learning Outcomes

After completing the module the student should be able to:

- 1 Analyse and synthesise mathematical knowledge in relation to learning, teaching and assessment in mathematics.
- 2 Critically reflect on the mathematics curriculum.
- 3 Review evidence to evaluate potential impact on learning and progress in mathematics.

Learning Outcomes of Assessments

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

Portfolio: book chapter	1	3
Presentation: chapter overview	2	

Outline Syllabus

Effective learning in mathematics within the 11-18 sector:

The National Curriculum and frameworks and initiatives relating to physics in the 11-18 sector;

Approaches to pedagogy in mathematics;

Current research and policies on learning, teaching and assessment applicable to mathematics in the 11-18 sector;

Strategies/activities to use ICT to enhance teaching and learning in mathematics;

Effective learning within mathematics;

Issues in development of learning in secondary learners with reference to mathematics;

Strategies for investigating and critically evaluating research literature;

Design a teaching resource for mathematics;

Learning Activities

Key theoretical/policy perspectives, along with an overview of learner development and individual needs;

Lectures and workshops will provide opportunities to evaluate learning, teaching and assessment activities within mathematics.

Support will be provided to enable students to develop their critical, analytical and evaluative skills in relation to their own approaches to learning, teaching and assessment within mathematics and to review subject focused literature;

Online resources will support and enhance student learning and engagement;

Notes

This module is part of the Joint MMath Mathematics with Education programme
It aims to equip participants with an understanding of the mathematics curriculum in England and approaches to learning, teaching and assessment in mathematics.