MODULE SPECIFICATION

Part 1: Information			
Module Title	Mathematics Education Project		
Module Code	UFMFH9-30-3	Level	Level 6
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Engineering, Design and Mathematics
Department	FET Dept of Engin Design & Mathematics		
Module type:	Project		
Pre-requisites	None		
Excluded Combinations	Mathematics, Statistics and Operational Research Project A 2020-21		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Features: Module Entry Requirements: 80 credits at Level Two or above.

Educational Aims: See Learning Outcomes.

Outline Syllabus: The syllabus includes:

An Introduction to Issues in Contemporary Mathematics Education:
Introduction to the National Curriculum and to the Cockcroft Report.
Lesson planning and observation.
Children's misconceptions in Mathematics.
Mathematical investigations.
Theories of learning Mathematics.

Practical Aspects of School Life:
Fundamentals of working with children.
Professional conduct within the school environment.
Working in a team.
Recording and feedback.

Research in Mathematics:
The geography of Mathematics.
Tools for research.

Communicating Mathematics:
Mathematical language and environments.
Report writing skills.
Presentation skills.

Teaching and Learning Methods: Scheduled contact is based partly on lectures, but mainly on multi-purpose group workshops and one-to-one supervision sessions. The workshops and supervisions serve as an arena in which to resolve issues brought up by the students on a weekby-week basis and to provide a space for other activities appropriate to learning and to discussing the syllabus material. The supervision sessions are geared also towards helping the student prepare for the school placement and for the three elements of assessment, in particular in connection with researching the undergraduate level Mathematics topic.

School placement occupies approximately ten weeks during which the student acts in an observer/assistant role (typically half a day per week between November and February).

Self-study includes: engaging with the resources and materials provided; undertaking research, both on Mathematics educational theory and practice, and on an undergraduate Mathematics topic; locating and utilising materials and information systems to support learning.

Contact Hours:

Scheduled contact: 60 hours
School placement:40 hours
Self-study and Assessment: 200 hours
Total: 300 hours

Part 3: Assessment

Component A:
There are three separate elements, viz., the essay (15%), the report (65%) and an online presentation (20%).

The essay is on a specific aspect of Mathematics Education, the particular title to be chosen on an annual basis by the module leader. The essay provides evidence, in particular, for Learning Outcome One.

The report describes the following three ingredients, together with a coherent and reflective account of way in which they have interacted as the student progressed through the module: an account of the chosen undergraduate level Mathematics topic; the school placement experience, with particular emphasis on the classroom delivery of the materials developed by the student; approaches to mathematical pedagogy in schools and at university. The report provides evidence, in particular, for Learning Outcomes Two, Three and Four.

The presentation gives an account of selected parts of the report, this selection being made so that all three themes - and their interaction - are included. The presentation provides evidence, in particular, for Learning Outcome Five.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Written Assignment - Component A		15 %	Essay (max 6 pages)
Report - Component A	✓	65 %	Report (final assessment and compulsory pass at 35% or above)(max 40 pages)
Presentation - Component A		20 %	Online Presentation

Resit Components	Final Assessment	Element weighting	Description
Presentation - Component A	✓	20 %	Online Presentation
Report - Component A		80 %	Report (max 40 pages excluding appendices)(to pass must achieve a minimum mark of 35%)

Part 4: Teaching and Learning Methods

Learning Outcomes

On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
To exhibit knowledge and understanding of some of the key issues in Mathematics Education, with regard to educational theory and philosophy, to policy (including the National Curriculum) and to practice	MO1
To undertake thorough research on an undergraduate level Mathematics topic and to produce a coherent written account of this research using appropriate language, notation and style	MO2
To design and to deliver (in a secondary classroom context to a group of pupils) a piece of Mathematics based on an appropriately adapted part of the research undertaken in Learning Outcome Two, this adaptation being undertaken with due and careful regard to the issues mentioned in Learning Outcome 1, and also to the goal of being an effective and enthusiastic ambassador for the discipline of Mathematics	MO3
To develop and to maintain - during the course of a ten week placement in a secondary school - a portfolio consisting of log sheets, lesson plans,observation sheets and reflective documents, all of these making connections with the items mentioned in Learning Outcomes One and Three	MO4
To deliver a coherent oral presentation, using appropriate media, in which an account of the activities mentioned in Learning Outcomes Two, Three and Four are described, and also their interaction discussed in way that explores the differences between Mathematics teaching and learning at school, on the one hand, and at university, on the other	MO5

Contact Hours

Independent Study Hours:	
Independent study/self-guided study	200
Total Independent Study Hours:	200
Placement Study Hours:	
Placement	40
Total Placement Study Hours:	40

	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	60
	Total Scheduled Learning and Teaching Hours:	60
	Hours to be allocated	300
	Allocated Hours	300
Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ufmfh9-30-3.html	

Part 5: Contributes Towards
This module contributes towards the following programmes of study: Mathematics [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19