

# **Module Specification**

# **Mathematics Education**

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Contents	
Module Specification	1
Part 1: Information	2
Part 2: Description	2
Part 3: Teaching and learning methods	3
Part 4: Assessment	5
Part 5: Contributes towards	7

## Part 1: Information

Module title: Mathematics Education

Module code: UTLGSW-15-2

Level: Level 5

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Arts Creative Industries & Education

Department: ACE Dept of Education and Childhood

Partner institutions: None

Delivery locations: Not in use for Modules

Field: Secondary Education and Lifelong Learning

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

## Part 2: Description

**Overview:** Not applicable

Features: Module Entry requirements: Students must have CRB/DBS clearance

**Educational aims:** In addition to the learning outcomes the following will not be explicitly assessed in the assignments:

Page 2 of 7 05 June 2023 demonstrate capacity to work in a professional teaching environment;

reflect on and articulate own views about teaching as a future career and how undertaking this module has contributed to their views;

be able to communicate effectively in a professional environment and to take responsibility for reporting accurately on processes and outcomes, with due regard to ethical considerations, including anonymity and safeguarding.

**Outline syllabus:** The module will reinforce relevant mathematics subject knowledge to enable the student to assist teaching and learning in a school classroom setting. A range of approaches to teaching and learning mathematics will be explored, focusing on developing understanding. Students will be introduced to a variety of mathematics teaching and learning resources and intervention strategies.

Approaches to observation of teaching and learning and recording of learning in mathematics will be explored.

A series of visits to school/college settings will include informal and formal observations of mathematics teaching and learning, meetings with mathematics teachers and assisting mathematics learners.

Taught sessions will prepare and support students in undertaking and reflecting on directed tasks during their school/college visits. Students will be briefed on safeguarding and child protection and will be required to complete a satisfactory DBS check prior to school placement.

## Part 3: Teaching and learning methods

**Teaching and learning methods:** Scheduled learning: This includes seminars, tutorials, workshops, presentations, guided study, online engagement and email contact, structured school/college /academy placement-based work.

Page 3 of 7 05 June 2023 Independent learning: There is an expectation that students engage in approximately 2-3 hours of independent learning for each hour of contact time on a module. This work includes hours engaged with essential reading, additional reading around areas of particular interest, assignment preparation, including preparation for teaching, and completion and review of feedback.

Independent work-based learning: At least 30 hours of placement based learning is a requirement of the module. The form of this is likely to vary but will include observing teaching and learning in an appropriate school/college/academy setting, supporting learning in classrooms, possibly some small group teaching of Secondary phase students, interviewing students and teachers. A CRB/DBS clearance will be required. Students will be supported in securing suitable and appropriately briefed placement schools.

Contact time for this module will take the form of seminars, tutorials, workshops, presentations, directed study, online engagement and email contact as well as at least 30 hours placement-based learning relating to the learning outcomes of the module.

The following structure represents a typical delivery; the precise delivery pattern will vary from year to year.

Small group events (seminars, tutorials, pre-placement interview, workshops, presentations): 36 hours

Guided study (group and individual tasks, including online engagement): 12 hours

Work related learning - at least 30 hours of work related learning in an appropriate setting/context.

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Demonstrate secure subject knowledge of the key concepts, processes and skills in the Secondary National Curriculum for mathematics at Key Stages 3 and 4 and relevant mathematics examination specifications at GCSE and A level

**MO2** Know the key concepts, processes and skills included in the Primary National Curriculum for mathematics and understand how these progress through Key Stage 2 into Key Stage 3

**MO3** Be able to observe and record outcomes of mathematics teaching and learning activities in a school classroom context in order to analyse and evaluate how these activities enable learners to develop their mathematical understanding

MO4 Be able to assist mathematics teachers and learners in a classroom setting

**MO5** Demonstrate understanding of some of the barriers to successful learning in mathematics and appreciation of the range of intervention strategies in place to enhance achievement in national tests/examinations

**MO6** Demonstrate their awareness and understanding of a range of pedagogical approaches to teaching mathematics that develop learners' conceptual understanding

MO7 Demonstrate their understanding in practice

#### Hours to be allocated: 150

#### Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

**Reading list:** The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link <u>https://uwe.rl.talis.com/index.html</u>

## Part 4: Assessment

**Assessment strategy:** The micro-teach will enable students to demonstrate their engagement with and understanding of the module taught input and learning

Page 5 of 7 05 June 2023 outcomes through the medium and pedagogical approach they take in this presentation of subject content knowledge.

Completion of a minimum of 30 hours in a school/college/academy placement setting, during which time directed tasks, observations and reflective records will be expected, is a requisite part of the module assessment. Students will be required to attend the module taught input on safeguarding and child protection, undertake a pre-placement interview/tutorial and have secured satisfactory DBS clearance prior to attending placement.

The school experience in addition to the module taught input will be assessed through students' reflective logs from their school placement experiences. They will be supported in the selection of 'best evidence' of learning and critical reflection and evaluation, as appropriate for undergraduate learners at Level 2.

#### Assessment components:

#### **Presentation** (First Sit)

Description: A 'micro-teach' (15 minutes) of a mathematical topic to tutors (this is like a presentation, simulating a teaching episode). Weighting: 50 % Final assessment: No Group work: No Learning outcomes tested: MO6, MO7

#### Written Assignment (First Sit)

Description: A selection from a series of written reflective evaluations (equivalent to 1500 words) based on directed tasks and observations undertaken in a school/ college/academy placement. Weighting: 50 % Final assessment: Yes Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

> Page 6 of 7 05 June 2023

### Presentation (Resit)

Description: A 'micro-teach' (15 minutes) of a mathematical topic to tutors (this is like a presentation, simulating a teaching episode). Weighting: 50 % Final assessment: No Group work: No Learning outcomes tested: MO6, MO7

### Written Assignment (Resit)

Description: A selection from a series of written reflective evaluations (equivalent to 1500 words) based on directed tasks and observations undertaken in a school/ college/academy placement. Weighting: 50 % Final assessment: Yes Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

## Part 5: Contributes towards

This module contributes towards the following programmes of study:

Mathematics with Qualified Teacher Status [Sep][FT][Frenchay][3yrs] - Not Running BSc (Hons) 2022-23

Mathematics with Qualified Teacher Status {Foundation} [Sep][FT][Frenchay][3yrs] -Not Running BSc (Hons) 2021-22