Module Descriptor

Title	Mathematics For Understanding		
Session	2025/26	**Status**	
Code	UGED07002	**SCQF Level**	7
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Education and Social Sciences**		
Module Co-ordinator	Steph Mackie		

Summary of Module

This module will cover relevant topics such as Number, Money, Measure; Information Handling; Shape, Position and Movement in depth to increase student confidence in their own mathematical competence.

Through investigative approaches to learning, students will develop greater understanding of concept development in mathematics as well as reflecting on their own attitudes and building up their confidence within mathematics. Students' personal knowledge, understanding, attitudes and skills will also be further developed.

The module aims to develop the concept of 'reflective practice' in order to encourage students to reflect on their own increased competence and confidence in coping with mathematical concepts and everyday mathematical problems.

Students will also, through reflection, identify their own developmental needs within the hierarchy of mathematical concepts being studied.

The module will support students towards meeting the GTCS Standard for Provisional Registration by working towards the following standards:

Have knowledge and understanding of contexts for learning to fulfil their responsibilities in literacy, numeracy, health and wellbeing and interdisciplinary learning (2.1.4);

Have knowledge and understanding of relevant educational principles and pedagogical theories to inform professional practices (2.3.1);

Have knowledge and understanding of the importance of research and engagement in professional enquiry (2.3.2);

Engage in reflective practice to develop and advance career-long professional learning and expertise (3.4.2).

In relation to learning for sustainability, students will be encouraged to develop a set of globally relevant skills, abilities and behaviours that will support them in becoming work ready and successful. They will also develop their enquiry skills.

Through participating in the module, students will develop UWS Graduate Attributes in personal, academic and professional aspects. Students will be provided with experiences to deepen their knowledge and understanding, develop their problem solving skills, work collaboratively and communicate effectively.

Module Delivery Method	On-Campus[1] ☐	Hybrid[2] ☒	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☒ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☐ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☐	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☒	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Apply knowledge and understanding of the general areas of Mathematics.
L2	Demonstrate knowledge that is embedded in the main theories, concepts and principles of Mathematics.
L3	Use numerical and graphical data to measure progress and achieve goals/targets.
L4	
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 7** Demonstrate an awareness of the dynamic nature of knowledge and the connections that are necessary to develop understanding in mathematics.
Practice: Applied Knowledge and Understanding	**SCQF 7** Apply knowledge, skills and understanding of mathematics in very practical and relevant contexts
Generic Cognitive skills	**SCQF 7** Evaluate information and ideas within topics such as Decimal Fractions and Algebra etc. to prevent the occurrence of misconceptions.

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Communication, ICT and Numeracy Skills	**SCQF 7** Use numerical and graphical data to measure progress and achieve goals/targets.
Autonomy, Accountability and Working with Others	**SCQF 7** Exercise independence in carrying out self-study tasks linked to weekly inputs.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching	
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours. Lecture/Core Content Delivery: 12 hours Tutorial/Synchronous Support Activity: 48 hours Personal Development Plan: 8 hours Independent Study: 132 hours	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	12
Tutorial / Synchronous Support Activity	48
Personal Development Plan	8
Independent Study	132
n/a	
n/a	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Haylock, D and Manning, R (2019) Mathematics explained for primary teachers. London: Sage Publications. Haylock, D. and Manning R. (2010) Student Workbook for Mathematics Explained for Primary Teachers. London: Sage Publications. Hansen, A, Drews, D, Dudgeon, J, Lawton, F and Surtees, L (2017) Children's errors in mathematics. Learning Matters.

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. All full-time students are required to attend all scheduled classes and participate with all delivered elements of the module as part of their engagement with their programme of study.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Aligned with the overall commitment to equality and diversity stated in the Programme Specifications, the module supports equality of opportunity for students from all backgrounds and with different learning needs. The module complies with University regulations and guidance on inclusive learning and teaching practice. Specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Education**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☒ **Yes** ☐ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Education
Moderator	R Egan
External Examiner	L Waddell
Accreditation Details	General Teaching Council for Scotland
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Exam (100%) which will assess theory and applied knowledge and will also include a reflective report on progress within the ongoing tasks.
Assessment 2
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
EXAM	☒	☒	☒	☐	☐	100%	1

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	1 hours

Change Control

What	**When**	**Who**
New template, no changes for 25/26	Apr 25	S Mackie