

University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Mathematics for Understanding			
Code: UGED07002	SCQF Level: 7 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Education & Social Sciences		
Module Co-ordinator:	S Mackie		
Summary of Module			
<p>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.</p> <p>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.</p> <p>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.</p> <p>Students will also, through reflection, identify their own developmental needs within the hierarchy of mathematical concepts being studied.</p> <ul style="list-style-type: none">• 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					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
See Guidance Note for details.					

Campus(es) for Module Delivery						
The module will normally be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	<input checked="" type="checkbox"/>	Term 2	<input checked="" type="checkbox"/>	Term 3	<input type="checkbox"/>

Learning Outcomes: (maximum of 5 statements) These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module. At the end of this module the student will be able to:	
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	Click or tap here to enter text.
L5	Click or tap here to enter text.
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)	<p>SCQF Level 7</p> <p>Demonstrate an awareness of the dynamic nature of knowledge and the connections that are necessary to develop understanding in mathematics.</p>

Practice: Applied Knowledge and Understanding	SCQF Level 7 Apply knowledge, skills and understanding of mathematics in very practical and relevant contexts.	
Generic Cognitive skills	SCQF Level 7 Evaluate information and ideas within topics such as Decimal Fractions and Algebra etc. to prevent the occurrence of misconceptions.	
Communication, ICT and Numeracy Skills	SCQF Level 7 Use numerical and graphical data to measure progress and achieve goals/targets.	
Autonomy, Accountability and Working with others	SCQF Level 7 Exercise independence in carrying out self-study tasks linked to weekly inputs.	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	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.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 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

	200 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Haylock, D and Manning, R (2019) Mathematics explained for primary teachers. London: Sage Publications.</p> <p>Haylock, D. and Manning R. (2010) Student Workbook for Mathematics Explained for Primary Teachers. London: Sage Publications.</p> <p>Hansen, A, Drews, D, Dudgeon, J, Lawton, F and Surtees, L (2017) Children's errors in mathematics. Learning Matters.</p>	
<p>(**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)</p>	
Attendance and Engagement Requirements	
<p>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.</p> <p>For the purposes of this module, academic engagement equates to the following:</p> <p>All full-time students (part-time and distant learning students should check with their programme leader for any queries) 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. Consideration will be given to students who have protection under the appropriate equality law. Please refer to UWS Regulations, Chapter 1, 1.64 – 1.67, available at the following link: http://www.uws.ac.uk/current-students/rights-and-regulations/regulatory-framework/</p> <p>In accordance with module and programme handbooks, any student whose attendance has fallen below the 75% minimum requirement for a module could be withdrawn from and given a re-attend decision for that module. To assure placement partners that students are appropriately prepared to undertake periods of school experience, unsatisfactory attendance across academic modules may prevent progress to placement, or result in withdrawal from the programme, as a student would be deemed not to have met the professional requirements of the programme as accredited by the GTCS.</p>	
Equality and Diversity	
<p>The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.</p>	

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. Using the VLE, learning materials will be presented electronically in formats that allow flexible access and manipulation of content (part-time and distant learning students should check with their programme leader for any queries). 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. The University's Equality, Diversity and Human Rights Policy can be accessed at the following link: <http://www.uws.ac.uk/equality/>

Our partners are fully committed to the principles and practice of inclusiveness and our modules are designed to be accessible to all. Where this module is delivered overseas, local equivalent support for students and appropriate legislation applies.

[UWS Equality and Diversity Policy](#)

(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
Assessment Results (Pass/Fail)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
School Assessment Board	Education
Moderator	R Fotheringham
External Examiner	L. Waddell
Accreditation Details	General Teaching Council for Scotland
Changes/Version Number	1.04

Assessment: (also refer to Assessment Outcomes Grids below)

The course and module handbooks, and other detailed material made available to students, will clarify the relationship between formative assessment tasks and the specific learning outcomes for the module. This will ensure that students can relate feedback from formative assessment to their individual progress on the learning outcomes for the module. On summative assessments, students will receive detailed information indicating the ways in which summative assessments will assess individual learning outcomes for the module. As appropriate, students will receive detailed information on how feedback will be provided for summative assessments.

Assessment 1

Summative assessment for this module will consist of an Exam (100%) which will assess theory and applied knowledge and will also include a reflective report on progress within the ongoing tasks.

Assessment 2

Formative Assessment – Group tasks involving collaboration, communication and the appropriate use of ICT and the integration of various aspects of knowledge.

(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.)

Assessment Outcome Grids (See Guidance Note)

Component 1							
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Exam	x	x	x			100%	

Change Control:

What	When	Who
Further guidance on aggregate regulation and application when completing template	16/01/2020	H McLean
Updated contact hours	14/09/21	H McLean
Updated Student Attendance and Engagement Procedure	19/10/2023	C Winter
Updated UWS Equality, Diversity and Human Rights Code	19/10/2023	C Winter
Guidance Note 23-24 provided	12/12/23	D Taylor
General housekeeping to text across sections.	12/12/23	D Taylor

Version Number: MD Template 1 (2023-24)