Module Descriptor

Title	Numeracy Across Learning		
Session	2025/26	**Status**	
Code	PGES11009	**SCQF Level**	11
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Education and Social Sciences**		
Module Co-ordinator	A Killen		

Summary of Module

The overarching aim of the module is to enhance the individual's role in the promotion (and attainment) of 'numeracy across learning' in their professional context; within own immediate learning environment and through collaborating with other 'key stakeholders' e.g. peers, the wider professional community and/or parents as applicable.

This is achieved by exploring the main theories, principles underpinning current approaches to the teaching, learning and assessment of numeracy and by enabling the learner to exercise substantial autonomy and initiative in the adoption of a systematic, well organised and focused approach to the teaching and promotion of numeracy within their professional context and in line with relevant policy frameworks/initiatives.

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 ☐	

[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

Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Appropriate to the aims of professional context-specific frameworks/policies, critically examine existing research on the teaching of numeracy as a means of informing transformative educational practice.
L2	Demonstrate enhanced professional knowledge and understanding of the broad concept of numeracy and of effective evolving pedagogy, appropriate to the aims of professional context-specific frameworks/policies.
L3	Review, consolidate and extend educational skills, practices and thinking to enhance effective promotion and attainment of numeracy across the learning context.
L4	Communicate effectively in module discussion, enhancing through collaboration, a shared understanding of 'numeracy' and its significance as a life skill.
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 11** Critical understanding of the principal theories, principles and concepts involved in the learning and teaching of numeracy Critical understanding of a range of specialised theories, principals and concepts involved in the learning, teaching and assessment of numeracy Critical awareness of current issues in defining 'numeracy' as an embedded skill across learning contexts
Practice: Applied Knowledge and Understanding	**SCQF 11** Critical understanding of the principal theories, principles and concepts involved in the learning and teaching of numeracy Critical understanding of a range of specialised theories, principals and concepts involved in the learning, teaching and assessment of numeracy Critical awareness of current issues in defining 'numeracy' as an embedded skill across learning contexts
Generic Cognitive skills	**SCQF 11** Developing original and creative responses to problems and issues Critically reviewing, consolidating and extending knowledge, skills practices and thinking in the field of numeracy
Communication, ICT and Numeracy Skills	**SCQF 11** Communicating, using appropriate methods, with a range of audiences; those with different levels of knowledge/expertise, peers, more senior colleagues and specialists and other key stakeholders (as appropriate) Using a wide range of software to support and enhance work at this level to increase effectiveness

Autonomy, Accountability and Working with Others	**SCQF 11** Exercising substantial autonomy and initiative in professional and equivalent activities Taking responsibility for own work and/or significant responsibility for the work of others Taking responsibility for a significant range of resources for teaching numeracy Demonstrating leadership and/or initiative and make an identifiable contribution to change and development in the teaching of numeracy across learning Practising in ways which draw on critical reflection on own and others' roles and responsibilities

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. The module handbook will provide specific information on the particular learning and teaching methodologies adopted however, in general terms, the module is delivered using an integrated (online) delivery approach. That is to say, the various formative activities/readings build into resources which learners can build on/refer back to throughout the module and which have immediate application to their respective personal and professional practice. The module consists of several related and inter-related themes, and the associated coursework consists of several independent and collaborative online tasks and selected reading. The handbook will also include a detailed module timeline to enable each learner to manage their study time; accordingly, to plan and review their progress against timescales and deadlines at regular intervals throughout the module.	
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	40
Asynchronous Class Activity	50
Independent Study	110
n/a	
n/a	
n/a	
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Access to internet: As the module is delivered entirely online via the University's virtual learning environment, participants must have access to an internet connected computer (or alternative, appropriate internet-connected device).

Boaler, J. (2016) Mathematical Mindsets: Unleashing Students' Potential Through Creative Math, Inspiring Messages and Innovative Teaching. San Francisco: Jossey Bass

Cotton, C. (2016) Teaching for Mathematical Understanding: Practical ideas for outstanding primary lessons. London: Routledge

Goos, M. Stillman, G. Vale, C. (2007) Teaching secondary school mathematics : research and practice for the 21st century. London: Allen & Unwin

Scottish Government (2016) National Improvement Framework for Scottish Education. [Online] Available: https://www.gov.scot/policies/schools/national-improvement-framework/#res491758

Thompson, I. (2010) Issues in Teaching Numeracy in Primary Schools. London: Open University Press

Westwood, P. (2006) Numeracy and Learning Difficulties: Approaches to Teaching and Assessment. London: David Fulton publishers

Web resources

Centre for Innovation in Mathematics Teaching

Education Scotland (2016) Numeracy Across Learning

Education Scotland (no date) Scottish Survey of Literacy and Numeracy (SSLN)

National Centre for Excellence in Teaching Mathematics

National Numeracy and Mathematics Progression Framework

UNESCO (2016) Education for All (EFA) Movement

UNESCO Institute for Statistics

(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:

Please also refer to the module and programme handbook with respect to the requirements for engagement.

In line with the Academic Engagement and Attendance Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on Moodle, and complete assessments and submit these on time. Please refer to the Academic Engagement and Attendance Procedure at the following link: Academic engagement and attendance procedure

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/

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. Using Moodle, learning materials will be presented electronically in formats that allow flexible access and manipulation of content. 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.
(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	CPL
Moderator	R Egan
External Examiner	D Lukic
Accreditation Details	
Module Appears in CPD catalogue	☒ **Yes** ☐ **No**
Changes / Version Number	

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1

A referenced essay which will require the individual to reflect on the planning, delivery and evaluation of a sequence of 5 lessons (chosen to improve the effective teaching and learning of numeracy in the classroom). Through this work, the individual is expected to demonstrate how they intend to develop the subject in the future and to disseminate their findings. This work counts towards 100% of the overall assessment for the module and the indicative word count of 4,500 words reflects, and is in line with, the advice and guidance set out via UWS' Assessment Handbook (reviewed and updated annually). In addition to the foregoing, individuals will be required to produce 'validated work-related evidence' in support of the formal assessment. This will be negotiated with the module tutor dependent on the individual's professional context.
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**
Essay	☒	☒	☒	☒	☐	100	

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%	hours

Change Control

What	**When**	**Who**
Transfer to new template, no changes for 25/26		
