

University of the West of Scotland

Module Description

Session: 202425

Title of Module: Numeracy across Learning			
Code: PGES11009	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Education		
Module Co-ordinator:	A Killen		
Summary of Module			
<p>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.</p> <p>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.</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Add name
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------	----------

Term(s) for Module Delivery

(Provided viable student numbers permit).

Term 1	<input type="checkbox"/>	Term 2	<input type="checkbox"/>	Term 3	<input checked="" 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	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.

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 Level 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 Level 11 Using a significant range of the principal skills, techniques, practices and/or materials which are associated with learning, teaching and assessing numeracy across learning Demonstrating originality or creativity in the application of knowledge, understanding and/or practices when developing numeracy skills

Generic Cognitive skills	<p>SCQF Level 11</p> <p>Developing original and creative responses to problems and issues Critically reviewing, consolidating and extending knowledge, skills practices and thinking in the field of numeracy</p>	
Communication, ICT and Numeracy Skills	<p>SCQF Level 11</p> <p>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</p>	
Autonomy, Accountability and Working with others	<p>SCQF Level 11</p> <p>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</p>	
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

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.

<p>Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p>	<p>Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p>
Asynchronous Class Activity	40
Lecture/Core Content Delivery	50
Independent Study	110
	200 Hours Total
<p>**Indicative Resources: (eg. Core text, journals, internet access)</p>	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>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).</p> <p>Boaler, J. (2016) <i>Mathematical Mindsets: Unleashing Students' Potential Through Creative Math, Inspiring Messages and Innovative Teaching</i>. San Francisco: Jossey Bass</p> <p>Cotton, C. (2016) <i>Teaching for Mathematical Understanding: Practical ideas for outstanding primary lessons</i>. London: Routledge</p> <p>Goos, M. Stillman, G. Vale, C. (2007) <i>Teaching secondary school mathematics : research and practice for the 21st century</i>. London: Allen & Unwin</p> <p>Scottish Government (2016) <i>National Improvement Framework for Scottish Education</i>. [Online] Available: https://www.gov.scot/policies/schools/national-improvement-framework/#res491758</p> <p>Thompson, I. (2010) <i>Issues in Teaching Numeracy in Primary Schools</i>. London: Open University Press</p> <p>Westwood, P. (2006) <i>Numeracy and Learning Difficulties: Approaches to Teaching and Assessment</i>. London: David Fulton publishers</p> <p>Web resources Centre for Innovation in Mathematics Teaching Education Scotland (2016) <i>Numeracy Across Learning</i> Education Scotland (no date) <i>Scottish Survey of Literacy and Numeracy (SSLN)</i> National Centre for Excellence in Teaching Mathematics National Numeracy and Mathematics Progression Framework</p>	

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:

For the purposes of this module, academic engagement equates to the following:
All full-time students (part-time and distance 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 Specification, 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 (part-time and distance 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	Career-Long Professional Learning
Moderator	TBC
External Examiner	D Lukic
Accreditation Details	
Changes/Version Number	1

Assessment: (also refer to Assessment Outcomes Grids below)

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.

(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
	✓	✓	✓	✓		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)