University of the West of Scotland

Module Descriptor

Session: 2023/24

Title of Module: Critical Analysis of Mathematics Teaching			
Code: UGED09005	**SCQF Level: 9 (Scottish Credit and Qualifications Framework)**	**Credit Points:20**	**ECTS: 10 (European Credit Transfer Scheme)**
School:	School of Education and Social Sciences		
Module Co-ordinator:	Linda Bell		

Summary of Module

The module is designed to develop expertise in relevant research, theories, case studies and legislation relating to and impacting upon successful learning and teaching in primary schools. Students will focus on Mathematics teaching.

Completion of this module allows students to undertake the Level 10 Dissertation module with a continued focus on Mathematics teaching. Alternatively, and by agreement with the module co-ordinator, students who wish to do so may choose to focus on an alternative curricular area/current issue in the dissertation.

The module will address:

1. Approaches over time to the teaching, acquisition and understanding of Mathematics teaching, including a range of relevant case studies.
2. National (Scottish and UK) and international perspectives relating to the teaching, acquisition and understanding of Mathematics.
3. International perspectives, including key indicators, student achievement, political and societal variations and how these may impact upon approaches to learning and teaching of Mathematics.
4. Current issues, theories and priorities relating to the teaching, acquisition and understanding of Mathematics teaching.

- The module will support students towards meeting the GTCS Standard for Provisional Registration by working towards the following standards: Professional Values (Social Justice; Trust and Respect; Integrity) (1.1); Professional Commitment (1.2); Have knowledge and understanding of education systems (2.2.1); Have knowledge and understanding of pedagogical theories and professional practice (2.1.1); Utilise pedagogical approaches and resources (3.1.2); Engage critically with literature, research and policy (3.3.1); Engage in reflective practice to develop and advance career-long professional learning and expertise (3.3.2).
- In relation to learning for sustainability, students will develop knowledge and skills in inclusion and social justice, enquiry, critical approaches, reflection, IDL and dealing with uncertainty.
- Through participating in the module, students will develop UWS Graduate Attributes and will demonstrate, in particular, that they are critical thinkers, analytical, inquiring, research-minded and knowledgeable.

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
☒	☐	☐	☐	☐	☐

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:
☐	☒	☐	☐	☐	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☒	Term 2	☐	Term 3	☐

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	Demonstrate awareness and understanding of the development of approaches to learning and teaching in relation to Mathematics teaching.
L2	Be aware of, discuss and reflect upon national and international approaches to the acquisition and understanding of Mathematics teaching.
L3	Analytically reflect upon how the acquisition and understanding of Mathematics teaching may be affected by political and societal variations.
L4	Demonstrate an understanding of academic literature that discusses current and emerging theories and policies relating to effective and successful approaches to learning and teaching as it relates to Mathematics teaching.
L5	Demonstrate an understanding of the contribution of citation indexes, online databases and journal abstracts to the navigation of academic literature.

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 **9** Demonstrate and / or work with: An understanding of how approaches to learning and teaching in relation to Mathematics teaching have been and are subject to change.

	A critical understanding of current and emerging theories and policies in relation to Mathematics teaching.	
Practice: Applied Knowledge and Understanding	SCQF Level **9** Apply knowledge skills and understanding: In using a range of the principal professional skills, techniques, practices and/or materials associated with the successful teaching in relation to Mathematics teaching . In using a number of skills, practices and/or materials that or specialised and/or advanced in relation to Mathematics teaching. In practising routine methods of inquiry and/or research in relation to Mathematics teaching.	
Generic Cognitive skills	SCQF Level **9** Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues in relation to Mathematics teaching. Identify and analyse routine professional problems and issues in relation to Mathematics teaching. Draw on a range of national, international, historic and current sources in making judgements and presenting arguments.	
Communication, ICT and Numeracy Skills	SCQF Level **9** Use a wide range of routine skills and some advanced and specialised skills in support of established practices in a subject/discipline/sector, for example: Present or convey, formally and informally, information on topics relating to Mathematics teaching to a range of audience, using a range of digital applications to support and enhance work. Interpret, use and evaluate numerical and graphical data to achieve goals/targets which relate to the stated learning outcomes.	
Autonomy, Accountability and Working with others	SCQF Level **9** Exercise autonomy and initiative working independently in activities relating to the stated learning outcomes and relate these at a professional level to successful practice in professional environments. Practise in ways that show awareness of own and others' roles and responsibilities. Work, under guidance, with specialist practitioners.	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

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	24
Asynchronous Class Activity	24
Independent Study	140
Choose an item.	
Choose an item.	
Choose an item.	
Choose an item.	
Choose an item.	
	Hours Total 200

****Indicative Resources: (e.g. Core text, journals, internet access)**

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

Bottomley et al. (2019) Critical Thinking Skills for your Education Degree. Critical Publishing (Available as e-book)

Cottrell, S. (2019) *The Study Skills Handbook*. Fifth edition. London: Palgrave Macmillan (e-book)

Click or tap here to enter text.

Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.

Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.

(**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:

All 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. 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/

Given the professional nature of the programme, 100% attendance and engagement is expected. The module co-ordinator and year group leader maintain an overview of attendance and engagement. Should there be concerns, there will be liaison between module co-ordinator, year group leader, personal tutor and the student to identify steps to support engagement and success.

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.

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

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 Aula VLE, 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/

Student teachers are encouraged to reflect on their developing understanding of aspects relating to equality and diversity and to consider how this helps them to work towards meeting the Standard for Provisional Registration (GTCS, 2021), of which demonstrating commitment to social justice and inclusion is a significant part.

(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 ☒No ☐
School Assessment Board	ESS
Moderator	Jennifer Ellis
External Examiner	Lesley Waddell
Accreditation Details	GTCS
Changes/Version Number	2.05

Assessment: (also refer to Assessment Outcomes Grids below)
This section should make transparent what assessment categories form part of this module (stating what % contributes to the final mark). Maximum of 3 main assessment categories can be identified (which may comprise smaller elements of assessment). **NB: The 30% aggregate regulation (Reg. 3.9) (40% for PG) for each main category must be taken into account. When using PSMD, if all assessments are recorded in the one box, only one assessment grid will show and the 30% (40% at PG) aggregate regulation will not stand. For the aggregate regulation to stand, each component of assessment must be captured in a separate box.** Please provide brief information about the overall approach to assessment that is taken within the module. In order to be flexible with assessment delivery, be brief, but do state assessment type (e.g. written assignment rather than "essay" / presentation, etc) and keep the detail for the module handbook. Click or tap here to enter text.
Assessment 1 Completion of a compare/contrast reading frame in relation to two relevant journal articles (or their equivalents)
Assessment 2 A 2000-word written critical analysis of one of the generic themes discussed in the module (effective pedagogies, motivation or assessment, for example), as agreed by the subject lead tutor.
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.)

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**
				√	√	40	0

Component 2							
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**
	√	√	√	√	√	60	0

Component 3							
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**
Combined Total for All Components						**100%**	**0 hours**

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)