Module Descriptor

Title	STEM Work Based Learning		
Session	2025/26	**Status**	
Code	EDUC10051	**SCQF Level**	10
Credit Points	40	**ECTS (European Credit Transfer Scheme)**	20
School	**Education and Social Sciences**		
Module Co-ordinator	L Barrett		

Summary of Module

This module will prepare students for their school experience placements. It will explore generic aspects of curriculum, pedagogy and assessment, as well as facilitating understanding of the schools and learning communities in which students will teach and their professional responsibilities within them.

Students will know and understand the content of the curriculum in relation to literacy, numeracy and health and wellbeing, and the methods and underlying theories for effective modelling and teaching of these cross-curricular priorities. Students will learn about specific learning needs and how to remove barriers to learning from classroom practice.

A variety of strategies to build relationships with learners, promote positive behaviour and celebrate success will be explored and the importance of applying the school's behaviour policy, including strategies for understanding and preventing bullying, emphasised.

Students will develop knowledge and understanding of the principles of assessment for formative and summative assessment purposes.

Students will be directed to read and analyse a range of appropriate educational and research literature and encouraged to engage with wider reading through accessing literature independently. Students will be supported to use what they have learned to critically examine their personal and professional attitudes and beliefs, to challenge, justify, evaluate and inform practice and to ask critical questions of educational policies.

Learning activities will encourage students to reflect and engage in self-evaluation using the Standard for Provisional Registration (GTCS, 2021). Students will maintain a record of their own professional learning and development in the placement portfolio.

Through participating in this placement module, students work towards attaining all professional standards as outlined in the Standard for Provisional Registration.

They also develop UWS Graduate Attributes and demonstrate, in particular, that they are critical thinkers, effective communicators, problem-solvers, socially responsible and research-minded.

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	Identify, analyse and evaluate the range of principal skills, techniques, practices and materials associated with the teaching of STEM subjects in the secondary school.
L2	Work effectively under guidance in a peer relationship with qualified practitioners.
L3	Exercise autonomy and initiative in professional activities.
L4	Recognise and critically assess the personal development and application of essential employability skills and attributes within the secondary school and their transferability to other real work contexts.
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 10** Demonstrating knowledge that covers and integrates most of the principal areas, features, boundaries, terminology and conventions of secondary education. Understanding critically the principles and evolving theories of curriculum design, contexts for learning and cross-curricular links. Understanding in detail one or two subject areas within the secondary curriculum, current educational issues and effective approaches to teaching and learning. Understanding the ways in which teaching and learning are developed, including a range of established techniques of professional enquiry.

[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

	Demonstrating knowledge of how to access and apply relevant findings from educational research.
Practice: Applied Knowledge and Understanding	**SCQF 10** Designing, delivering and assessing effective, appropriate and stimulating programmes of work, in one or two subject areas within the secondary curriculum, which are suitable for children at different stages of secondary education. Using skills, practices and materials which are specialised, advanced or at the forefront of classroom practice in a variety of settings, environments and circumstances. Executing a defined project of action research related to teaching and learning in a chosen subject area of secondary education. Practising in a range of professional contexts, which include a degree of unpredictability and specialism, and maintaining a safe, caring and purposeful learning environment within these contexts. Understanding and applying the principles of assessment, recording and reporting and using the results of assessment to evaluate and improve teaching, and to improve standards of attainment in one or two subject areas within the secondary curriculum.
Generic Cognitive skills	**SCQF 10** Undertaking critical analysis, evaluation and synthesis of ideas, concepts, information and issues in educational contexts. Justifying a personal stance on educational issues by referring to appropriate evidence from a range of sources. Reflecting on and acting to improve the effectiveness of their own practice and contributing to the processes of curriculum development, school development planning and meeting the educational needs of school communities. Adopting an enquiring approach to professional practice, demonstrating some originality and creativity in finding solutions to professional issues. Maintaining a record of personal professional learning and development.
Communication, ICT and Numeracy Skills	**SCQF 10** Sommunicating effectively, using a variety of media including digital technologies, to promote and develop positive relationships, and to stimulate pupils and achieve the objectives of lessons. Communicating effectively with peers, children, staff and others in school. Communicating and reporting effectively, both orally and in writing. Engaging in professional dialogue with peers, university staff and school colleagues. Constructing and sustaining reasoned and coherent arguments about educational matters and professional practices.
Autonomy, Accountability and Working with Others	**SCQF 10** Exercising autonomy and initiative in professional activities. Working effectively under guidance in a peer relationship with qualified practitioners and other agencies and individuals.

	Working with others and, at times, taking a leading role in bringing about change, development and new thinking relating to an aspect of primary education. Dealing with complex ethical and professional issues in accordance with current professional and/or ethical codes of practice and in accordance with the needs of schools and wider communities. Reflecting on achievement of some aspects of the Standard for Provisional Registration.

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. In all education modules on the BSc (Hons) STEM with Education programme, we take an authentic, best-practice and forward-looking approach to learning activities and assessment. There is a strong emphasis on situated learning and real professional scenarios. We are committed to interactive learning and the small number of learning activities that are purely transmission of information are normally pre-recorded. In workshops, which utilise classrooms, and other facilities as appropriate, the outdoors and the Aula VLE, main methodologies include collaborative working, problem-based learning, real-world tasks, research based learning, placement based learning, enquiry-based learning, micro teaching, and student presentations. All learning activities are aligned to relevant aspects of the professional standards. Individual, group or tutor-led reflection is required throughout. Learning activities develop 21st century skills such as communication, collaboration, creativity and critical thinking.	
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	36
Tutorial / Synchronous Support Activity	36
Personal Development Plan	12
Asynchronous Class Activity	16
Work-based Learning	300
Please select	
TOTAL	400

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

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Curriculum for Excellence documentation and support materials (including National Qualifications) at www.educationscotland.gov.uk

National Qualifications documentation at www.sqa.gov.uk

Brooks, V, Abbott, I and Huddleston, P (eds) (2019) Preparing to teach in secondary schools: a student teacher's guide to professional issues in secondary education. London: Open University Press.

*Capel, S, Leask, M and Younie, S (2019) Learning to teach in the secondary school: a companion to school experience (8th ed). Abingdon: Routledge.

Cohen, L, Manion, L, Morrison K and Wyse, D (2010) A guide to teaching practice (revised 5th ed). Abingdon: Routledge.

Pollard, A (2018) Reflective teaching in schools (5th ed). London: Bloomsbury Academic.

Pollard, A (ed) (2014) Readings for reflective teaching in schools. London: Bloomsbury Academic.

Zwozdiak-Myers, P (2012) The teacher's reflective practice handbook: becoming an extended professional through capturing evidence-informed practice. Abingdon: Routledge.

(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 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/

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 in academic modules or within learning blocks 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 General Teaching Council for Scotland.

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 the 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. 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. Through studying this module, student teachers are encouraged to engage with pedagogical and learning theories and draw on these appropriately to inform curriculum design and content, where appropriate taking account of additional support needs and respecting individual difference and supporting learners' understanding of themselves, others and their contribution to the development and sustainability of a diverse and inclusive society. A direct focus on these aspects not only advances equality in the student environment, by promoting empathy and affiliation, but also within the school settings where student teachers undertake their school experience.
(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	E Wotherspoon
External Examiner	J Munro
Accreditation Details	General Teaching Council for Scotland
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	Updated External Examiner to Judith Munro

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
A learning log completed during school experience placement, which includes lesson planning and evaluation, reflection on wider school issues and personal development planning. This component is worth 50% of the total module mark.
Assessment 2
An essay of 3000 words, in which the student will critically assess the personal development and application of essential employability skills and attributes within the secondary school and their transferability to other real work situations. This component is worth 50% of the total module mark. Both components are assessed on a pass/fail basis, with passes in both required in order for students to pass the module.
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**
Learning Log	☒	☒	☒	☒	☒	100	90

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

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**
New template, no changes for 25/26	Apr 2025	L Barrett