Module Descriptor

Title	Environmental Protection		
Session	2026/27	**Status**	Published
Code	CEWM08007	**SCQF Level**	8
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	David Thompson		

Summary of Module

This module takes a holistic view of the Earth's environment and explores the impact of human activities that cause environmental pollution. We explore the implications of different pollutants on the environment, humans and animal health, including the use and handling of toxic and hazardous substance. We also explore how legislation and regulatory frameworks dictate identifying and evaluating hazards, particularly toxic risks, and exploring the behavior, dispersal, and environmental fate of substances.

This module will also explores the impact of environmental pollution in the workplace, effective waste treatment or disposal methods, including emissions to air, liquid effluents, and solid waste. Relevant legislative and regulatory frameworks for safety and environmental management are introduced and contextualized.

Learning is supported by case studies and laboratory work, linking theoretical knowledge to practical applications. These activities provide real-world examples and reinforce the importance of environmental stewardship and safety compliance.

Also, by undertaking this module you develop a range of 'I am UWS' Graduate Attributes.

Universal – development of critical thinking, ethically and research minded.

Work Ready – an effective problem solver, communicator and ambitious.

Successful – by being autonomous, resilient and driven.

Module Delivery Method	**On-Campus[1]**	**Hybrid[2]**	**Online[3]**	**Work -Based Learning[4]**

[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

	☐		☒		☐	☐
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	Demonstrate an awareness of the interaction between human activity and wellbeing of lifeforms (including humans) in the environment and workplace.
L2	Identify and integrate the requirements for handling and disposal of representative solid, liquid and airborne waste materials, including sampling, analysis and treatment.
L3	Discuss the regulatory implications of Environmental Protection.
L4	Carry out a variety of laboratory investigations related to a range of environmental scenarios.
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 8** A broad knowledge of the interactions between human activities, hazardous substances and the welfare of human and environmental systems. An understanding of the requirements of safe and acceptable handling of materials in the workplace and of their discharge into the environment. Appropriate familiarity with legal / regulatory frameworks.
Practice: Applied Knowledge and Understanding	**SCQF 8** Use a range of professional skills, techniques and practices in identifying, analysing and evaluating workplace and environmental hazards and appropriate procedures for the safe use and disposal of hazardous materials. Carry out routine and more open ended investigations and enquiries into qualitative and quantitative evaluation of potential workplace and environmental hazards.
Generic Cognitive skills	**SCQF 8** Undertake critical analysis, evaluation and synthesis of ideas, concepts and information related to workplace and environmental issues. Identify and analyse routine professional problems and issues related to workplace and environmental chemical hazards. Use a range of sources in making judgements on issues of workplace and environmental safety.
Communication, ICT and Numeracy Skills	**SCQF 8** Make formal and informal presentations on mainstream issues to a range of audiences (laboratory reports, assignments, oral presentation etc). Use a range of IT applications to research and present aspects of

	environmental concern. Interpret, use and evaluate numerical, graphical and non-numerical information to achieve goals.
Autonomy, Accountability and Working with Others	**SCQF 8** Exercise autonomy and initiative in investigations and in information acquisition. Practice working with others taking account of roles and responsibilities. Deal with certain ethical and professional issues under appropriate guidance.

Prerequisites	**Module Code**	**Module Title**
	Other Essentially a standalone module, though students may find it helpful to have done some chemistry at SCQF level 7.	
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. This module will be delivered in a number of ways: lectures, tutorials, group work and some computer lab work.	
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)
Tutorial / Synchronous Support Activity	32
Laboratory / Practical Demonstration / Workshop	16
Independent Study	152
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: Virtual Learning Environment: Timetables, lecture summaries, seminar, assignments, staff contact information and other information associated with the running of the Module. Baird & Cannon, Environmental Chemistry, 5th Edition, 2013, Palgrave MacMillan. International and UK Standards, eg ISO14001, EMAS available from the Barbour Index database "Safety at Work", Eighth Edition, J Channing, 2014 ISBN 978 0 415 65696 2* www.sepa.org.uk www.netregs.gov.uk https://www.zerowastescotland.org.uk/ https://www.recycleforscotland.com/ https://www.gov.scot/policies/managing-waste/resource-efficiency/

(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 attending and participating in all timetabled programme activities including on-campus and online teaching sessions, asynchronous online learning activities, placement, work-based elements, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** Attendance to all classes either online or in person (If required).

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. In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.
(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	**Biological Sciences Health**
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	Biology
Moderator	Robin Freeburn
External Examiner	M Brown
Accreditation Details	REHIS/ IOSH
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2

Assessment (also refer to Assessment Outcomes Grids below)

Assessment 1
Essay
Assessment 2
Presentation
Assessment 3
Laboratory / Clinical / Field Notebook
(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	☒	☒	☒	☐	☐	40	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Presentation	☒	☒	☒	☐	☐	20	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Laboratory/ Clinical/ Field notebook	☐	☐	☐	☒	☐	40	0
Combined total for all components						100%	0 hours

Change Control

What	**When**	**Who**
Updated Moderator and external examiner Increased Lab by 10% and decressed essay by 10% Updated Introduction and revision no	Feb 2025	C Seyfried
Updated Introduction and revision no		