



Module Descriptor

Title	Environmental Protection					
Session	2024/25	Status	Published			
Code	CEWM08007	SCQF Level	8			
Credit Points	20	ECTS (European Credit Transfer Scheme)	10			
School	Health and Life Sciences					
Module Co-ordinator	Chris Seyfried					

Summary of Module

This module adopts a holistic approach to the earth environment and man's impact upon that environment. It is concerned with the safe use and handling of toxic and hazardous substances, considering the potential impact on users, the immediate vicinity and the environment as a whole. The nature and evaluation of hazards, especially toxic hazards, will be discussed. The behaviour of substances in the environment, their dispersal and ultimate environmental fate, will be exemplified. Consideration will be given to safe handling of materials in the workplace. Procedures for the treatment and/or disposal of waste materials – discharges to atmosphere, liquid effluent and solid waste – will be discussed.

The legislative and regulatory frameworks covering aspects of safety and environmental management will be developed as appropriate. Case studies and laboratory programme are used to exemplify the theoretical aspects of this broad topic area.

This module allows students to use a variety of skills such as investigations, laboratory work, identification of appropriate legislation and data searches to deliver information both oral and written, to peers and members of staff.

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-Cam	campus ¹		Hybrid ²	Online ³		Work -Based Learning⁴	
Campuses for Module Delivery	Ayr	ifries		Lanarks	 Online / Distance Learning Other (specify) 			
Terms for Module Delivery	Term 1		Term 2		Term	13		
Long-thin Delivery over more than one Term	Term 1 – Term 2			Term 2 – Term 3		Term Term		

Lear	ning 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 legal and regulatory framework for workplace and environmental protection.
L4	Carry out a variety of laboratory investigations related to a range of environmental scenarios, discussing results in an appropriate manner where possible referring to current legislation/control measures
L5	

Employability 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 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						

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

	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	SCQF 8
Cognitive skills	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,	SCQF 8
ICT and Numeracy Skills	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,	SCQF 8
Accountability and Working with Others	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 learnin 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	Student Learning Hours
to achieve the module learning outcomes are stated below:	(Note: Learning hours include both contact hours and hours spent on other learning activities)
Tutorial / Synchronous Support Activity	30
Laboratory / Practical Demonstration / Workshop	18
Independent Study	152
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources

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

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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/managingwaste/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 <u>Student Attendance and Engagement Procedure</u>, Students are academically engaged if they are regularly attending and participating in timetabled oncampus and online teaching sessions, asynchronous online learning activities, courserelated 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: <u>UWS Equality, Diversity and Human Rights Code.</u>

(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	Biological Sciences & Health
Moderator	TBC
External Examiner	TBC

Accreditation Details	This module is part of the BSc (Hons) Environmental Health with		
	Professional Practice programme; accredited by The Royal Environmental Health Institute of Scotland (REHIS).		
Module Appears in CPD catalogue	Yes No		
Changes / Version Number	1		

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	\square	\square	\square			50	0

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

Component 3								
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours	
				\square		30	0	
Combined total for all components					100%	0 hours		

Change Control

What	When	Who