University of the West of Scotland Module Descriptor

Session: 2023/24

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Status: Published

Title of Module: Environmental Protection

Code: CEWM08007	SCQF Level: 8 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	Jan Miller		

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										
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning					
			✓							

Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Fully Online

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

HybridC

Online with mandatory face-to-face learning on Campus

HvbridO

Online with optional face-to-face learning on Campus

Work-based Learning

Learning activities where the main location for the learning experience is in the workplace.

Campus(es) for	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)										
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:				
			✓							

Term(s) for Module Delivery						
(Provided viable s	tudent numbers pe	ermit).				
Term 1						

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:

- 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.

Employability Skills and F	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 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 Level 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 Level 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 Level 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 Level 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.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:			
	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:		

^{*} Indicates that module descriptor is not published.

Learning and Teaching	
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)
Tutorial/Synchronous Support Activity	30
Laboratory/Practical Demonstration/Workshop	18
Independent Study	152
	200 Hours Total

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

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/

Referencing: Pears, R. and Shields, G. (2019) Cite them right: the essential referencing guide. 11th rev. edn. London: Red Globe Press. Print and electronic copies are available from UWS Library.

(**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)

Engagement Requirements

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure

Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: Attendance at synchronous sessions (workshops and tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Supplemental Information

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Robin Freeburn
External Examiner	S Boyd
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).
Changes/Version Number	1.06 Change to HybridC, in addition, changed to 30 hours of lectures and 18 hours of tutorials and workshops.

Assessment: (also refer to Assessment Outcomes Grids below)

One assignment based on environmental issues in business worth 50% of the final mark

An oral presentation worth 20% of the final mark

A laboratory reports worth 30% of the final mark.

(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 Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1								
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours		
Essay	✓	✓	✓		50	0		

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Presentation	✓	✓	✓		20	0

Component 3							
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours	
Laboratory/ Clinical/ Field notebook				✓	30	0	
	100%	0 hours					

Footnotes

- A. Referred to within Assessment Section above
- B. Identified in the Learning Outcome Section above

Note(s):

- 1. More than one assessment method can be used to assess individual learning outcomes.
- 2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).

 This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity

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.

Please refer to the UWS Equality and Diversity Policy at the following link:

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)