University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Waste Management			
Code: CEWM11005	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Gillian Clayton		

Summary of Module
This is an attendance based, continuously assessed module.   On completion of this module you will gain the following Graduate Attributes: **Critical thinking** by working **collaboratively** with colleagues on **researchminded** assignments   **Problem solving** and **effective communication**   - Your research will be **innovative** and **creative** producing **resilient** solutions to our environmental and waste management challenges.   Waste Management provides students with access to best practice in operational controls and techniques for waste reduction, handling, treatment, disposal and diversion. Passive and active technologies for waste management are covered and include a full range of waste types i.e. food waste, compostable materials, electrical waste, hazardous waste and wastes suitable for waste-to-energy facilities. This module considers processes for waste handling and conversion and uses case studies from industrial facilities that deal in handling waste materials. Included in this module is a focus on international practices, with case studies to support the lectures.   Class materials, research resources, exercises, class communications, administrative information and assignment handling will be supported by a Virtual Learning Environment Students will gain a comprehensive and detailed knowledge of options for reduction of waste generation and waste materials handling, treatment and disposal.

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	Critically evaluate and succinctly communicate the roles of a range of sustainable waste management techniques
L2	Apply critical analysis and prioritise optional approaches to reducing types and amounts of wastes requiring treatment and disposal
L3	Evaluate, in detail, the impacts and benefits of various techniques in managing wastes in a variety of environmental situations (including international examples)

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 **11** Gain a critical understanding of the range and variety of waste management techniques, particularly the options for reducing waste to landfill. Evaluate the effectiveness of waste management techniques.
Practice: Applied Knowledge and Understanding	SCQF Level **11** Identify waste management/treatment/disposal options with particular regard to environmental impacts and benefits. Evaluate information and gain a coherent understanding of theories and practices in implementing a range of techniques for waste management..
Generic Cognitive skills	SCQF Level **11** Develop and demonstrate an ability to communicate effectively in a variety of professional settings and provide clear guidance

	on appropriate techniques for waste handling. Demonstrate a detailed understanding of an issue and develop a solution to a waste problem.
Communication, ICT and Numeracy Skills	SCQF Level **11** Demonstrate a full understanding of the process of preparing oral and written reports, using IT and other presentation techniques. Communicate complex waste management options in a professional setting.
Autonomy, Accountability and Working with others	SCQF Level **11** Work as part of a professional team to analyse information from a waste generation situation, formulate a solution and present it to peers, colleagues and specialists. Work independently to develop a plan to manage a specific waste stream and prepare a presentation that would be suitable to present to an industrial or business client.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	All applicants must satisfy the qualification and/or experience requirements as established in the admission criteria. See Reg. 6.3.
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	30
Tutorial/Synchronous Support Activity	6
Independent Study	164

	Hours Total 200

**Indicative Resources: (eg. Core text, journals, internet access)
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Healthcare without Harm, Non-incineration Medical Waste Treatment Technologies in Europe, 2004. Department of Health, Health Technical Memorandum 07-01: Safe Management of Healthcare Waste, 2006 Barbour Index on-line www.netregs.gov.uk www.defra.gov.uk www.sepa.org.uk www.wascot.org.uk Click or tap here to enter text. 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: Attendance of all on-campus sessions (classes and tutorials), and submission of assessments.

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..

(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	Physical Sciences
Assessment Results (Pass/Fail)	Yes ☐ No ☒
School Assessment Board	Physical Sciences
Moderator	Professor Andrew Hursthouse
External Examiner	Adekunle Oke
Accreditation Details	Not accredited.
Changes/Version Number	2.13 Summary of Module: Removal of planned site visit. Module Delivery: Changed to face-to-face from blended. Indicative Resources: Updating text books.

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1: Essay / Report (80%)
Assessment 2: Oral Presentation (20%)
(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
Essay / Report	X	X	X	N/A	N/A	80	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
Oral Presentation	X	X	X	N/A	N/A	20	1
Combined Total for All Components						100%	1 hours