



## Module Descriptor

Title	Net Zero and carbon management		
Session	2024/25	Status	Published
Code	CEWM11011	SCQF Level	11
Credit Points	20	ECTS (European Credit Transfer Scheme)	10
School	Health and Life Sciences		
Module Co-ordinator	Kiri Rodgers		
<b>Summary of Module</b>			
<p>This module delivers a comprehensive framework to assess and direct activity to reach net zero targets within business and industry settings. It is a blend of live sessions (online and face-to-face) and self-paced online study, specifically designed to empower participants from a wide background of experience to effectively undertake carbon auditing and develop their own sustainable emission reduction plan.</p>			
<p>The course enables participants to critically evaluate and discuss the concept of Net Zero and the surrounding legal and social duties. This includes being able to identify, analyse and apply management principles to assess the impact of their organisation on the environment and calculate their carbon footprint, using a variety of established tools and methodologies. Participants will learn to communicate causes of climate change due to carbon emissions and critically evaluate its impact and options available to an organisation to reduce their carbon footprint and improve sustainability on a personal, departmental, and organisational level.</p>			
<p>Topics covered includes Understanding climate change, Greenhouse gases (GHG), Carbon &amp; Energy, Climate Change international drivers, Energy awareness, emissions data sources &amp; terminology, the concept of Net Zero and the surrounding legal and social duties. Auditing Methodologies, GHG standards and protocol applications, Performance management, People, policy and Place, and SMEs Carbon disclosure mechanisms.</p>			
<p>Also, by undertaking this module you develop a range of 'I am UWS' Graduate Attributes.</p> <p>Universal – development of critical thinking, ethically and research minded.</p> <p>Work Ready – an effective problem solver, communicator and ambitious.</p> <p>Successful – by being autonomous, resilient and driven</p>			

<b>Module Delivery Method</b>	<b>On-Campus<sup>1</sup></b> <input type="checkbox"/>	<b>Hybrid<sup>2</sup></b> <input checked="" type="checkbox"/>	<b>Online<sup>3</sup></b> <input type="checkbox"/>	<b>Work -Based Learning<sup>4</sup></b> <input type="checkbox"/>
<b>Campuses for Module Delivery</b>	<input type="checkbox"/> Ayr <input type="checkbox"/> Dumfries	<input checked="" type="checkbox"/> Lanarkshire <input type="checkbox"/> London <input type="checkbox"/> Paisley	<input type="checkbox"/> Online / Distance Learning <input type="checkbox"/> Other (specify)	
<b>Terms for Module Delivery</b>	Term 1 <input type="checkbox"/>	Term 2 <input type="checkbox"/>	Term 3 <input type="checkbox"/>	
<b>Long-thin Delivery over more than one Term</b>	Term 1 – Term 2 <input checked="" type="checkbox"/>	Term 2 – Term 3 <input type="checkbox"/>	Term 3 – Term 1 <input type="checkbox"/>	

Learning Outcomes	
<b>L1</b>	Critically examine a range of theories and standard protocols, which underpin the ability to monitor carbon emissions
<b>L2</b>	Apply knowledge to complex issues and develop and understanding of tools and methodologies for delivering energy and GHG reductions for an organisation
<b>L3</b>	Act as a motivated professional, able to problem solve and communicate to an appropriate level for carbon auditing
<b>L4</b>	Develop critical problem-based learning skills and transferable skills to prepare the student for employment in a position dealing with carbon auditing, GHG emission reduction, including technological options and emerging solutions
<b>L5</b>	

Employability Skills and Personal Development Planning (PDP) Skills	
<b>SCQF Headings</b>	<b>During completion of this module, there will be an opportunity to achieve core skills in:</b>
<b>Knowledge and Understanding (K and U)</b>	<b>SCQF 11</b> Gain a critical understanding of the range and variety of variables that impact environmental, animal and human health.  Evaluate the effectiveness of control measures in relation to impacts on multiple levels.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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

<b>Practice: Applied Knowledge and Understanding</b>	<b>SCQF 11</b> Demonstrate the integration of the main subject areas expected for carbon auditing and develop knowledge of how the implementation emission reduction activities impact organisational operations
<b>Generic Cognitive skills</b>	<b>SCQF 11</b> Develop skills that will allow you to identify, conceptualise, define new problems and issues, and then develop creative responses to those challenges. Analysing the links between policy and strategy and implementation of local, national and/or international incentives. Develop ability to communicate effectively in a variety of profession situations
<b>Communication, ICT and Numeracy Skills</b>	<b>SCQF 11</b> You will be able to disseminate complex data, in written and oral methods, to audiences with different skills sets and expertise. Appropriate communication in a professional environment
<b>Autonomy, Accountability and Working with Others</b>	<b>SCQF 11</b> Work as part of a professional team to analyse information and formulate a solution and present it back to the group. Work independently to create a programme of management for an environmental issue.

<b>Prerequisites</b>	<b>Module Code</b>	<b>Module Title</b>
	<b>Other</b>	
<b>Co-requisites</b>	<b>Module Code</b>	<b>Module Title</b>

<b>Learning and Teaching</b>	
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.	
<b>Learning Activities</b> During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	<b>Student Learning Hours</b> (Note: Learning hours include both contact hours and hours spent on other learning activities)
Laboratory / Practical Demonstration / Workshop	36
Independent Study	164
Please select	0
Please select	0
Please select	
Please select	
<b>TOTAL</b>	<b>200</b>

### Indicative Resources

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

- <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>
- <https://circularecology.com/embodied-carbon-footprint-database.html>
- <https://www.climatepartner.com/en/the-road-to-net-zero>
- o The GHG Emissions Calculation Tool
- o "Built on GHG Protocol" Calculation Tools
- o GHG Protocol Corporate Standard (<https://ghgprotocol.org/corporate-standard>)

**(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 to all online, on-campus classes and laboratory sessions

### 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](#).

**(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

<b>Divisional Programme Board</b>	<b>Biological Sciences Health</b>
<b>Overall Assessment Results</b>	<input checked="" type="checkbox"/> Pass / Fail <input type="checkbox"/> Graded
<b>Module Eligible for Compensation</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.
<b>School Assessment Board</b>	Biological Sciences and Health
<b>Moderator</b>	Iain McLellan
<b>External Examiner</b>	TBC
<b>Accreditation Details</b>	IEMA Accredited

Module Appears in CPD catalogue	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Changes / Version Number	1

<b>Assessment (also refer to Assessment Outcomes Grids below)</b>
<b>Assessment 1</b>
Case study (70%)
<b>Assessment 2</b>
Presentation (30%)
<b>Assessment 3</b>
(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.)

<b>Component 1</b>							
<b>Assessment Type</b>	<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>Weighting of Assessment Element (%)</b>	<b>Timetabled Contact Hours</b>
Portfolio of written work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	70	0

<b>Component 2</b>							
<b>Assessment Type</b>	<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>Weighting of Assessment Element (%)</b>	<b>Timetabled Contact Hours</b>
Presentation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30	0

<b>Component 3</b>							
<b>Assessment Type</b>	<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>	<b>Weighting of Assessment Element (%)</b>	<b>Timetabled Contact Hours</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Combined total for all components</b>						100%	0 hours

### Change Control

<b>What</b>	<b>When</b>	<b>Who</b>

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