

**University of the West of Scotland
Module Descriptor**

Session: 2023/24

Title of Module: Science Independent Study			
Code: CHEM08005	SCQF Level: 8 (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:	Jorge Chacon		
Summary of Module			
<p>This module begins with the selection of an appropriate topic in the field of Science. The selected topic of study will be agreed with the Module co-ordinator, and an academic supervisor will be appointed.</p> <p>This module will involve a substantial body of work connecting investigation through a range of textbook and other literature sources readily available to the student; at least 10 different references should be quoted in the report.</p> <p>Typically a final submission report of approximately 6000 word equivalents will be produced. This should encompass a general review of the topic concerned, and clear analysis of technical aspects independently written to demonstrate a good depth of understanding, together with some discussion broader in context, perhaps covering social and/or economic implications.</p> <p>Once the topic has been agreed, and the academic supervisor identified, responsibility for progressing the exercise lies with the student, under guidance from the supervisor. Student and supervisor will agree an outline specification for the range of investigation to be pursued, the time frame for completion of work, and the structure of the final report. The student will be required to submit a draft report at least three weeks before the due date for the submission of the final report.</p> <p>The Graduate Attributes relevant to this module are listed below: Academic: Critical thinker, analytical, inquiring, knowledgeable, problem solver, autonomous, incisive, innovative. Personal: Effective communicator, influential, motivated Professional: Collaborative, ambitious, driven.</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
	✓		✓		
<p>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.</p> <p>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</p> <p>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.</p>					

HybridC
Online with mandatory face-to-face learning on Campus
HybridO
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 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 student numbers permit).

Term 1	Term 2	Term 3
	✓	✓

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:
L1. Demonstrate the ability to prepare a substantial, technically sound and proficiently-presented report on a topic of professional interest to a student of a discipline related to Chemistry or Chemical Engineering, based on in depth personal study.

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 8. Broad knowledge and understanding of the main principles and concepts associated with the chosen subject area. Detailed knowledge of some aspects of the chosen topic. Some knowledge and understanding of major current issues associated with the chosen topic.
Practice: Applied Knowledge and Understanding	SCQF Level 8. Using a variety of sources (including electronic) to retrieve, interpret, evaluate and integrate information relevant to the chosen topic.
Generic Cognitive skills	SCQF Level 8. Undertaking a critical analysis of relevant information to draw conclusions on issues associated with the chosen topic.
Communication, ICT and Numeracy Skills	SCQF Level 8. Making effective use of IT skills to obtain, process and evaluate numerical (where suitable) and graphical data (where suitable) to enable the production of an appropriate written report on the chosen topic.

Autonomy, Accountability and Working with others	<p>SCQF Level 8. Identifying and addressing individual learning needs in the subject area associated with the chosen topic.</p> <p>Planning effectively, including setting and meeting targets, the overall work involved in the production of the report on the studied topic (agreed under supervision).</p> <p>Taking advice on professional and ethical matters relating to the chosen topic.</p>	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	Module Title:
	Other:	Suitable Chemistry or Chemical Engineering.
Co-requisites	Module Code:	Module Title:

* Indicates that module descriptor is not published.

Learning and Teaching	
<p>This module covers a wide variety of theoretical, conceptual and practical areas, which require a range of knowledge and skills to be displayed and exercised. Delivery of its syllabus content therefore involves a diversity of teaching and assessment methods suitable to the learning outcomes of the module; these include formal lectures, guidance/tutorial on project work, completion and submission of written coursework making use of appropriate forms of IT and VLE, and independent study.</p>	
<p>Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p>	<p>Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p>
Lecture/Core Content Delivery	2
Tutorial/Synchronous Support Activity	18
Independent Study	180
	200 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Core text, journals, internet access and/or any other recourse is dependent on chosen topic, and some advice will be provided by the respective supervisor.</p>	
<p>(**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)</p>	
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](#)

Supplemental Information

Programme Board	Physical Sciences
Assessment Results (Pass/Fail)	No
Subject Panel	Physical Sciences
Moderator	Mohammed Yaseen
External Examiner	M Paterson
Accreditation Details	
Changes/Version Number	2.11 XX details updated Section 9- Module Delivery has been updated

Assessment: (also refer to Assessment Outcomes Grids below)

Written Assignment

(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)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Case study	✓	100	20
Combined Total For All Components		100%	20 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

This module is suitable for any student with appropriate Chemistry or Chemical Engineering background, it does not involve practical laboratory or field work, however, if special support is needed to complete the learning activities associated with the module then the University's Health and Safety Officer should be consulted to ensure that appropriate support is provided. Current University policy on Equality and Diversity applies.

[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)