

MODULE SPECIFICATION

Part 1: Information						
Module Title	21st Century Economic Geology					
Module Code	UBGMNP-15-3		Level	Level 6		
For implementation from	2020-	21				
UWE Credit Rating	15		ECTS Credit Rating	7.5		
Faculty	Faculty of Environment & Technology		Field	Geography and Environmental Management		
Department	FET [FET Dept of Geography & Envrnmental Mgmt				
Module type:	Stanc	Standard				
Pre-requisites		None				
Excluded Combinations		None				
Co- requisites		None				
Module Entry requirements		None				

Part 2: Description

Features: Module Entry Requirements: Students must have 60 credits at Level 2

Educational Aims: See Learning Outcomes

Outline Syllabus: Genetic classification of ore and mineral deposits.

Ore formation: magmatic, residual, sedimentary systems.

Metamorphic ore deposits.

Economic importance of metal deposits.

Industrial minerals, aggregates, salt.

Environmental aspects of exploitation of mineral energy resources.

An understanding of carbon capture and carbon storage.

Teaching and Learning Methods: Scheduled learning on this module includes lectures, demonstrations and practical classes. Local fieldwork sessions will aid knowledge and skills development

Independent learning includes hours engaged with essential reading, completion of practical work, assignment preparation and completion. These sessions constitute an average time as

indicated below.

Activity (Hours) Contact time (lectures, field and laboratory sessions) (36) Assimilation, development of knowledge and independent reading (65) Exam preparation (24) Coursework preparation (25) Total study time (150)

Students will receive, on average, 3 hours contact time per week. This will be predominantly in the form of lectures/practicals that will cover the principles and processes related to ore-forming minerals and carbon storage. There will be practical sessions to enable students to revise and improve their recognition skills and knowledge of the most common economic minerals plus map and graphics work to introduce some of the principles of and techniques.

Some sessions will take the form of tutorials for students to discuss site interpretation and environmental aspects. There may also be local fieldwork or site visits. One-to-one support will be provided during practical sessions and via email.

Part 3: Assessment

Summative assessment:

Component A – Examination (1 hour). Learning outcomes 1-4.

Written examination based on a choice of seen questions.

This will assess students' ability to research academic literature and apply it to interpretation of ore-forming reservoir processes and exploitation or there understanding of carbon capture and storage.

Students will be able to demonstrate their understanding of key processes and discuss environmental impacts of exploitation.

Component B – Group Report (2000 words per group report). Learning outcomes 1-4.

Students will be based in groups to collect (data will be provided if students cannot collect their own data due to COVID-19) and analyse data and work together to determine the amount of remediation needed for an area. The group together will collect data and then distribute the data for analysis and come together to write up the report. Groups will be between 3-4 people with a maximum of 650 words per person.

Students will be able to demonstrate that they can construct an argument and support it critically with references from academic literature.

Guidance on how to complete group work will be provided and students will be expected to attend timetabled sessions to share their progress with the work. Students will be expected to complete individual peer assessment forms as part of the submission, as set out in the FET Group work policy. There will be one mark given per group if the peer assessment form indicate that the work was completed equally; if these forms indicate that one person has not completed the same amount of work the marks will be different for the people within the group.

Formative work:

Formative work will be set weekly during practical and tutorial sessions for students' self assessment. Students will receive preparation exercises including discussions during tutorials for the summative assessment.

Resit:

Component A – Examination. Learning outcomes 1-4.

Written examination based on a choice of seen questions.

This will assess students' ability to research academic literature and apply it to interpretation of ore-forming reservoir processes and exploitation or there understanding of carbon capture and storage.

Students will be able to demonstrate their understanding of key processes and discuss environmental impacts of exploitation.

Component B – Report (1000 words). Learning outcomes 1-4.

Data will be given to the student to analyse and determine the amount of remediation needed for an area. Students will be able to demonstrate that they can construct an argument and support it critically with references from academic literature.

The word count here is more than the first sit as this work is individual and not completed in a group.

First Sit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	*	50 %	Online Written examination based on choice of seen questions. Academic year 2020-2021 year this will be an online exam.
Group work - Component B		50 %	Report (2000 words)
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	~	50 %	Online Written examination based on choice of seen questions
Written Assignment - Component B		50 %	Essay (1500 words)

Part 4: Teaching and Learning Methods							
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:						
	Module Learning Outcomes		Reference				
	Review and explain the range of ore-forming processes and the systems that generate fossil fuels.						
	Identify and interpret the global locations of mineral resources and locations of carbon capture and carbon storage.						
	Critically evaluate the impact of mineral exploitation						
	Produce coherent written arguments that discuss sustainable and environmentally responsible management of economic resources						
Contact Hours	Independent Study Hours:						
	Independent study/self-guided study	11	4				
	Total Independent Study Hours:	11	4				
	Scheduled Learning and Teaching Hours:						
	Face-to-face learning	30	6				

	Total Scheduled Learning and Teaching Hours:	36		
	Hours to be allocated	150		
	Allocated Hours	150		
Reading List	The reading list for this module can be accessed via the following link:			
	https://rl.talis.com/3/uwe/lists/F5000F32-D53A-8239-DEA1-CD4A679A9278.html?lang=en- US&login=1			

Part 5: Contributes Towards

This module contributes towards the following programmes of study: