

### **MODULE SPECIFICATION**

Part 1: Information						
Module Title	Sedimentary Environments and Palaeoecology					
Module Code	UBGMP9-30-2		Level	Level 5		
For implementation from	2019-	20				
UWE Credit Rating	30		ECTS Credit Rating	15		
Faculty	Faculty of Environment & Technology		Field	Geography and Environmental Management		
Department	FET [	FET Dept of Geography & Envrnmental Mgmt				
Module type:	Standard					
Pre-requisites		Earth Materials 2018-19, Living Earth 2018-19				
Excluded Combinations		None				
Co- requisites		None				
Module Entry requirements		None				

# Part 2: Description

Overview: This module will build on Level 1 modules on sedimentary rocks and palaeontology.

In this module you will examine the environments in which different types of sediments are formed and how they become sedimentary rocks. This module also highlights the environmental and ecological processes that lead to particular fossil assemblage.

Educational Aims: See Learning Outcomes.

Outline Syllabus: You will cover:

Earth surface processes, weathering and erosion, mechanisms of sediment transport

The nature and classification of environments in terms of paleoecology

Terrestrial aquatic environments: alluvial fans, rivers, deltas, lakes

Desert (aeolian systems) environments

Glacial and periglacial environments

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Coastal, estuarine and shallow marine environments

Coral reefs and carbonate producing environments

Exposure surfaces, hardgrounds, palaeosols

Palaeoautecology and palaeosynecology

Teaching and Learning Methods: See Outline Syllabus and Assessment.

### Part 3: Assessment

#### Summative assessment:

Component A – Examination (2 hours). Learning Outcomes 1-7.

Written examination with a practical component.

#### Strategy:

This will assess students' ability to interpret the products and life forms of different sedimentary environments and how they form facies and associations in the rock record.

Students will be able to demonstrate their understanding of key concepts in interpreting sedimentary architecture and palaeoecology and the impact of environmental change.

The exam will also assess students' engagement with academic literature.

Component B - Field work reports (1500 words each). Learning Outcomes 1-7.

Element 1: Field report based on semester 1 work. Learning outcomes 1, 2, 4, 6, 7.

### Strategy:

Students will be able to build up the information for this report throughout the module and receive formative feedback.

The assignment will examine students' application of knowledge gained from teaching on the course and their background reading.

Students will be able to demonstrate that they have practical skills to interpret sedimentary environments.

The report will include an independent interpretation of a field locality so students will be able to demonstrate their understanding of sedimentological parameters and their engagement with academic literature.

Element 2: Field report based on semester 2 work. Learning Outcomes 1-7.

#### Strategy:

Students will be able to build up the information for this report throughout the module and receive formative feedback.

The assignment will examine students' application of knowledge gained from teaching on the course and their background reading.

Students will be able to demonstrate that they have practical skills to interpret sedimentary environments and carry out palaeoecological surveys.

The report will include an independent interpretation of a field locality so students will be able to demonstrate their understanding of sedimentological and palaeoecological parameters and their engagement with academic literature.

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### Formative work:

Formative work will be set weekly during practical and field sessions for students' self-assessment. Formative work will be an integral part of the reading strategy. Students will receive preparation practical exercises that will help with interpretative questions for the summative assessment.

#### Resit:

The resit will involve a resit examination (2 hours, Component A), and/ or a single report of 2500 words (Component B, Element 2) the brief for which will be designed to draw on the full module syllabus. This report is shorter than the combined first sit Elements 1 and 2 because it will only require one introduction/context, and one concluding sections.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B		30 %	Report 2 (1500 words)
Report - Component B		30 %	Report 1 (1500 words)
Examination - Component A	<b>✓</b>	40 %	Written examination (2 hours)
Resit Components	Final Assessment	Element weighting	Description
Report - Component B		60 %	Report (2500 words)
Examination - Component A	<b>✓</b>	40 %	Written examination (2 hours)

Part 4: Teaching and Learning Methods							
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:						
	Module Learning Outcomes						
	Articulate key concepts and ideas in the fields of sedimentology and palaeoecology						
	Categorise key processes and products of sedimentation in the range of terrestrial and marine environments  Describe environmental adaptations adopted by organisms  Evaluate changes in sedimentary environments and the impact on organisms  Evaluate ecological limitations on organisms						
	Analyse and interpret sedimentary facies and architecture		MO6				
	Demonstrate independent engagement with academic literature		MO7				
Contact Hours	Independent Study Hours:  Independent study/self-guided study	8					
	B						
	Total Independent Study Hours:	22	8				
	Scheduled Learning and Teaching Hours:						

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	Face-to-face learning	72	
	Total Scheduled Learning and Teaching Hours:	72	
	Hours to be allocated	300	
	Allocated Hours	300	
Reading List	The reading list for this module can be accessed via the following link:  https://uwe.rl.talis.com/modules/ubgmp9-30-2.html		

## Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Geology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Geology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19