



Module Specification

Sedimentary Environments and Palaeoecology

Version: 2023-24, v2.0, 31 Jul 2023

Contents

Module Specification	1
Part 1: Information	2
Part 2: Description	2
Part 3: Teaching and learning methods	3
Part 4: Assessment.....	4
Part 5: Contributes towards	7

Part 1: Information

Module title: Sedimentary Environments and Palaeoecology

Module code: UBGMP9-30-2

Level: Level 5

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

College: Faculty of Environment & Technology

School: FET Dept of Geography & Environmental Mgmt

Partner institutions: None

Field: Geography and Environmental Management

Module type: Module

Pre-requisites: Earth Materials 2022-23

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body 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.

Features: Not applicable

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

Coastal, estuarine and shallow marine environments

Coral reefs and carbonate producing environments

Exposure surfaces, hardgrounds, palaeosols

Palaeoautecology and palaeosynecology

Part 3: Teaching and learning methods

Teaching and learning methods: See Outline Syllabus and Assessment.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Articulate key concepts and ideas in the fields of sedimentology and palaeoecology

MO2 Categorise key processes and products of sedimentation in the range of terrestrial and marine environments

MO3 Describe environmental adaptations adopted by organisms

MO4 Evaluate changes in sedimentary environments and the impact on organisms

MO5 Evaluate ecological limitations on organisms

MO6 Analyse and interpret sedimentary facies and architecture

MO7 Demonstrate independent engagement with academic literature

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

Reading list: The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ubgmp9-30-2.html) via the following link <https://uwe.rl.talis.com/modules/ubgmp9-30-2.html>

Part 4: Assessment

Assessment strategy: Summative assessment:

Online Examination (24 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 online exam will also assess students' engagement with academic literature.

Assessment Task 2: Field work reports (1500 words each). Learning Outcomes 1-7.

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.

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.

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, and 2 reports .

The words the brief for which will be designed to draw on the full module syllabus.

Assessment tasks:

Examination (Online) (First Sit)

Description: Online examination (24 hours)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Report (First Sit)

Description: Report 1 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Report (First Sit)

Description: Report 2 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Examination (Online) (Resit)

Description: Online examination (24 hours)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Report (Resit)

Description: Report 1 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Report (Resit)

Description: Report 2 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Geology [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2022-23

Geology [Sep][FT][Frenchay][3yrs] - Not Running BSc (Hons) 2022-23