



## **Module Specification**

### **Sedimentary Environments and Palaeoecology**

Version: 2021-22, v2.0, 19 Jul 2021

#### **Contents**

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

## Part 1: Information

**Module title:** Sedimentary Environments and Palaeoecology

**Module code:** UBGMP9-30-2

**Level:** Level 5

**For implementation from:** 2021-22

**UWE credit rating:** 30

**ECTS credit rating:** 15

**Faculty:** Faculty of Environment & Technology

**Department:** FET Dept of Geography & Environmental Mgmt

**Partner institutions:** None

**Delivery locations:** Frenchay Campus

**Field:** Geography and Environmental Management

**Module type:** Standard

**Pre-requisites:** Earth Materials 2020-21

**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:**

**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:

Component A – 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.

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.

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 (24 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.

### **Assessment components:**

#### **Examination (Online) - Component A (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 - Component B (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 - Component B (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) - Component A (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 - Component B (Resit)**

Description: Report (2500 words)

Weighting: 60 %

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][FT][Frenchay][3yrs] BSc (Hons) 2020-21

Geology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21