Module Specification

Applied Sedimentology

Version: 2023-24, v3.0, 16 May 2023

Contents

Part 1: Information

Module title: Applied Sedimentology

Module code: UBGLF1-15-3

Level: Level 6

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Geography & Envrnmental Mgmt

Partner institutions: None

Field: Geography and Environmental Management

Module type: Module

Pre-requisites: Sedimentary Environments and Palaeoecology 2021-22

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See Learning Outcomes

Outline syllabus: 1. Principal theories and concepts in sedimentology.
2. Climate and tectonic processes.
3. Sequence stratigraphy.

4. Basin analysis.
5. Diagenesis and geochemistry of sedimentary rocks.
6. Seismic interpretation, 2D & 3D.
7. Core analysis.

Part 3: Teaching and learning methods

Teaching and learning methods: Scheduled learning on this module includes lectures, demonstrations and practical classes.

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 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 hydrocarbon exploration and production. There will be practical sessions to enable students to revise and improve their recognition skills and knowledge of basin correlation.

There may also be local fieldwork or site visits. One-to-one support will be provided during practical sessions and via email.

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

MO1 Articulate principle theories and concepts in sedimentology (Component A/B)

MO2 Model and interpret sedimentological environments from field and data analysis (Component A/B)

MO3 Appraise and implement analytical and graphical techniques to investigate sedimentary basins (Component A/B)

MO4 Synthesise and apply sedimentological skills and knowledge to conduct a basin analysis project at a professional level (Component B)

MO5 Demonstrate independent and critical engagement with academic literature (Component B)

MO6 Demonstrate transferable skills including communication (oral, written and aural), team work, decision making, risk analysis, and time and project management (Component A/B).

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Tutorials = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ubgmq9-30-3.html

Part 4: Assessment

Assessment strategy: Summative assessment:

Assessment Task - Company Report (2500 words). Learning outcomes 1-6.

Students will be able to demonstrate that they can being multiple datasets together

and construct an argument and support it critically with references from academic literature.

Resit:

Assessment Task – Company Report (2500 words). Learning outcomes 1-6.

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.

Assessment tasks:

Report (First Sit)
Description: 2500 word (or equivalent) based on given data for exploration / resource investment.
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

Report (Resit)
Description: 2500 word (or equivalent) based on given data for expolration / resource investment.
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Geology [Sep][FT][Frenchay][3yrs] - Not Running BSc (Hons) 2021-22

Geology [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2021-22