MODULE SPECIFICATION

Part 1: Information			
Module Title	Climate Change: Tracing the Record		
Module Code	UBGMKU-15-2	Level	Level 5
For implementation from	2019-20		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Envrnmental Mgmt		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Features: Module Entry Requirements: 60 credits at level 1

Educational Aims: See Learning Outcomes.

In addition the educational experience may explore, develop, and practise but not formally discretely assess the following:

Field observation and recording;
Awareness of the development of Quaternary science as an academic discipline

Outline Syllabus: The syllabus includes:

Patterns and causes of Quaternary climate change: long-term (glacialinterglacial cycles); short-term (climate change during the Holocene interglacial).

Quaternary dating techniques: isotopes; dendrochronology; relative dating.

Reconstructing Ipswichian interglacial and Devensian glacial environments: fieldwork techniques; laboratory techniques; data interpretation.

Reconstructing Holocene interglacial environments: microfossil and sediment analyses; data interpretation; distinguishing between climate- and human-induced environmental change.

Teaching and Learning Methods: Scheduled learning on this module comprises a programme of interactive keynote lectures, supported by laboratory work and seminars.

Independent learning includes time engaged with essential reading, practical completion and examination preparation.

Students will receive, on average, 3 hours of contact each week in the form of lectures, laboratory sessions or seminars. In addition to the formal classes, students will be set key reading and/or activities each week to complete for the following session.

The amount of time spent on activities in this module is:

Activity:
Contact time: 36 hours
Assimilation and development of knowledge: 78 hours
Exam preparation: 36 hours
Total study time: 150 hours

Part 3: Assessment

Summative Assessment:

Component A:
Element 1: Written examination (1 hour):
Unseen question paper based on material covered during the second half of the module.

Students will answer one essay style question.

Answers will be assessed according to the following criteria:
Relevance of the content of the essay to the question set.
Structure and organisation.
Grounding in literature, and use of evidence and supporting material.
Clarity, coherence and depth of argument.
Standards of literacy and presentation.

Component B Element 1: Portfolio of practical work (equivalent to 1,500 words):
Submission of a portfolio of practical work completed during the first half of the module.

Portfolios will be assessed according to the following criteria:
Relevance of the content of the work to the question set.
Accuracy and robustness of the palaeoenvironmental interpretation.
Reflection on the significance of the data for the regional Quaternary record, drawing on literature and supporting material.
Standards of literacy and presentation.

Formative work:

Component A – A selection of example examination questions will be available to students. They will have the opportunity to obtain formative feedback on draft answers.

Component B – Students will have the opportunity for feedback during each of the practical exercises during the scheduled contact sessions.

First Sit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		50 %	Portfolio of practical work (1500 words)
Examination - Component A	✓	50 %	Written examination (1 hour)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Portfolio - Component B		50 %	Portfolio of practical work (1500 words)
Examination - Component A	✓	50 %	Written examination (1 hour)

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
Describe and account for patterns of natural climate variability at a range of temporal and spatial scales during the late-Quaternary geological period	MO1
Recognise the attributes and palaeoenvironmental applications of commonly used proxies for climate change	MO2
Select appropriate field techniques and palaeoenvironmental proxies for specific environmental reconstructions	MO3
Interpret proxies to produce a palaeoenvironmental reconstruction	MO4
Demonstrate a critical awareness of academic literature describing climate change science	MO5
Produce coherent written arguments that demonstrate an understanding of climate change science	MO6

Contact Hours

Independent Study Hours:	
Independent study/self-guided study	114
Total Independent Study Hours:	114
Scheduled Learning and Teaching Hours:	
Face-to-face learning	36
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://uwe.rl.talis.com/modules/ubgmku-15-2.html

Part 5: Contributes Towards
This module contributes towards the following programmes of study: Geography [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19 Geology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19 Geography [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19 Geology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19