STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Information			
Module Title	Climate Change and Environmental Hazards		
Module Code	UBGMTD-30-3	Level	Level 6
For implementation from	2018-19		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Envrnmental Mgmt		
Contributes towards			
Module type:	Standard		
Pre-requisites	Climate Change: Tracing the Record 2018-19		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
Features: Module Entry requirements: 60 credits at level 2   **Educational Aims:** See Learning Outcomes.   In addition to the Learning Outcomes, the educational experience may explore, develop, and practise but not formally discretely assess the following: In-class discussions of emerging climate change science, and the policies for climate change mitigation and adaptation   **Outline Syllabus:** The module is divided into three sections.   Part one – 'global warming' and Earth system science: Magnitudes, rates and causes of recent (post AD1945) climate and environmental changes within

the context of the Quaternary geological period.

The role of anthropogenic disruptions of key global biogeochemical cycles in the enhanced greenhouse effect

Earth systems science, Gaia and climate change

Part two – modeling future climate and environmental changes:

Approaches to modeling future changes: complexity and time scales

IPCC scenarios of future greenhouse emissions: political and economic uncertainties

Part three – future climate change: impacts and uncertainties

Uses output from climate models to identify key climate-related hazards

Indicative examples: heat waves, wildfires, hurricanes, avalanches, permafrost thaw, sea level rise, floods, droughts, vector-borne diseases

Critical evaluation of hazard impact mitigation and adaptation strategies

Teaching and Learning Methods: Scheduled learning on this module includes lectures, computer-based sessions and individual formative feedback meetings.

Independent learning includes time engaged with reading, completion of formative work and preparation and completion of assessments.

Students will receive – on average - 3 hours' contact time per week.

This will be in a range of formats, including weekly keynote lectures or computer-based sessions, individual formative feedback meetings and support via e-mail.

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

Activity Hours
Contact time 72
Assimilation and development of knowledge 120
Exam preparation 54
Coursework preparation 54
Total study time 300

Part 3: Assessment

Summative Assessment

Component A: Examination (2 hours). Learning outcomes 2-6
Written examination
Timing: semester 2 examination period
Unseen question paper
Examines material covered throughout the academic year
Students will answer two questions from a choice of six

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

Component B
Individual essay. Learning outcomes 1, 2, 3, 5, 6

Equivalent to 3000 words
Topic: abrupt climate change during the Quaternary geological period and its application to future climate predictions and policies

Submission: end of semester 1

Essays will be assessed according to the following criteria:

Clear and succinct identification of the characteristics of the selected abrupt climate change event

Critical review of the causes of the onset of the abrupt event, based on peer-reviewed literature

Explanation of the contribution of palaeoclimate research to climate prediction models

Explanation of the contribution of palaeoclimate research to global climate change policy initiatives

Presentation and literacy

Formative work:

Formative questions will be set regularly for students' self assessment. Students will receive individual formative feedback on their essay drafts. Practice exam questions will be distributed during semester 2 and formative feedback given to students.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		50 %	Individual essay (3000 words)
Examination - Component A	✓	50 %	Examination (2 hours)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		50 %	Individual essay (3000 words)
Examination - Component A	✓	50 %	Examination (2 hours)

Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will be able to:

	Module Learning Outcomes
MO1	Contextualise recent and projected atmospheric greenhouse gas concentrations and climate change within geological timescales
MO2	Critically evaluate how variable understandings of Earth system feedbacks generate the current range of predictions for climate change and environmental hazards
MO3	Critically evaluate future scenarios of greenhouse gas emissions, climate change and climate change-related hazards

	MO4	Demonstrate a sophisticated understanding of the key approaches to climate change-related hazard adaptation and mitigation
	MO5	Demonstrate critical engagement with academic literature
	MO6	Produce coherent written arguments that demonstrate an understanding of climate change science

Contact Hours	**Contact Hours**	
	Independent Study Hours:	
	Independent study/self-guided study	228
	Total Independent Study Hours:	228
	Scheduled Learning and Teaching Hours:	
	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/ubgmtd-30-3.html	