



MODULE SPECIFICATION

Part 1: Information			
Module Title	Structural Geology and Geophysics		
Module Code	UBGMPQ-30-3	Level	Level 6
For implementation from	2019-20		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Environmental Mgmt		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Features: Module Entry Requirements: 60 credits at Level 2</p> <p>Educational Aims: This module will build on levels 1 and 2 modules addressing geological structures and plate tectonics.</p> <p>Outline Syllabus: You will cover:</p> <p>Principal theories and concepts of structural geology and geophysics Styles of deformation, stress and responses. Rheology and quantification of deformation. Structural systems and evolution in time and space. Global tectonics. Gravity measurements and applications. Seismology and whole Earth structure. Geomagnetism and geoelectricity. Map interpretation and geophysical surveys.</p> <p>Teaching and Learning Methods: The principal theories and concepts will be introduced through lectures and case studies. These will be reinforced through tutorial discussions and</p>

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project work. There will be local field work aimed at providing the basis for the coursework assessment. There will be practical and computer-based workshops to develop students' interpretational, graphics and presentation skills. One-to-one support will be provided during practical and tutorial sessions and via email.

Part 3: Assessment

Summative assessment:

Component A – Examination (2 hours):

Written examination with a practical component.

Strategy:

This will assess students' ability to interpret rock deformation in terms of global tectonic processes. Students will be able to demonstrate their understanding of key concepts in structural geology and geophysics and their ability to explain and synthesis relationships between surface and subsurface processes. The exam will also assess students' engagement with academic literature.

Component B – Fieldwork report and map interpretation:

The report will be equivalent to 2500 words.

Strategy:

The report will enable students to demonstrate their knowledge and skills using various media. It will enable assessment of their ability to organise their thoughts, summarise their knowledge and express interpretations and arguments. Students will be able to demonstrate 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.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B		50 %	Report (2500 words)
Examination - Component A	✓	50 %	Examination (2 hours)
Resit Components	Final Assessment	Element weighting	Description
Report - Component B		50 %	Report (2500 words)
Examination - Component A	✓	50 %	Examination (2 hours)

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Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Categorize and interpret rock deformation in terms of global tectonic processes</td> <td>MO1</td> </tr> <tr> <td>Critically evaluate geophysical concepts and the use of geophysical survey methods in interpretation of geological structures and maps and in site investigations</td> <td>MO2</td> </tr> <tr> <td>Explain and synthesise the relationships between active tectonic processes on the Earth's surface and underlying processes within the Earth</td> <td>MO3</td> </tr> <tr> <td>Quantify rock deformation over space and time</td> <td>MO4</td> </tr> <tr> <td>Demonstrate independent and critical engagement with academic literature</td> <td>MO5</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Categorize and interpret rock deformation in terms of global tectonic processes	MO1	Critically evaluate geophysical concepts and the use of geophysical survey methods in interpretation of geological structures and maps and in site investigations	MO2	Explain and synthesise the relationships between active tectonic processes on the Earth's surface and underlying processes within the Earth	MO3	Quantify rock deformation over space and time	MO4	Demonstrate independent and critical engagement with academic literature	MO5				
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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/ubgmpq-30-3.html</p>																

Part 5: Contributes Towards
This module contributes towards the following programmes of study: