

### **MODULE SPECIFICATION**

Part 1: Information						
Module Title	Research in Geology					
Module Code	UBGMJN-30-2		Level	Level 5		
For implementation from	2019-	2019-20				
UWE Credit Rating	30		ECTS Credit Rating	15		
Faculty	Faculty of Environment & Technology		Field	Geography and Environmental Management		
Department	FET [	ET Dept of Geography & Envrnmental Mgmt				
Module type:	Stand	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.

**Outline Syllabus:** The syllabus has a substantive applied project/fieldwork element to enable students to undertake geological research in the field and laboratory to build towards their finalyear dissertation.

The syllabus includes:

Introduction to the research process in geology.

Critically reviewing academic literature.

Formulating research questions, research design and data collection.

Data analysis: descriptive statistics, errors, measures of central tendency.

Correlation, probability distributions.

Sequential data, trend detection, semivariograms.

Analysis of spatial data, interpolation.

Analysis of multivariate data.

Introduction to GIS and remote sensing.

Practising research in geology.

#### STUDENT AND ACADEMIC SERVICES

**Teaching and Learning Methods:** Scheduled learning on this module includes workshops, demonstrations, practical classes and field excursions.

Independent learning includes hours engaged with essential reading, completion of practical work, assignment preparation and completion. These sessions constitute an average time:

Activity:

Contact time (field and laboratory sessions): 72 hours

Fieldwork: 78 hours

Assimilation, development of knowledge and independent reading: 100 hours

Assessment preparation: 50 hours

Total study time: 300 hours

Students will receive, on average, 3 hours' contact time per week. This is essentially a practical and field-based module. Practical sessions will be introduced by short lectures and demonstrations and there will be a range of formats, including use of local field sites, laboratory, tutorial or computer-based sessions. The module also includes a residential field excursion where students will work on a range of projects relating to field geology, data collection and interpretation. One-to-one support will be provided during practical and field sessions and via email.

### Part 3: Assessment

Summative assessment:

Component A - Fieldtrip presentations (Group work):

The presentations will be assessed during the residential field trip but students will incorporate a literature review that they prepared prior to the trip.

The groups will need to design a research programme, devise a programme of work and manage their time effectively.

Students will have the opportunity to demonstrate accurate collection and presentation of field data and engagement with academic literature.

The presentations will assess students' organisational skills, clarity of visual and oral presentation, scientific rigour of their research methodology and analysis of results.

Students will be able to demonstrate their understanding of geological processes and issues by their responses to peer questioning.

Component B – Element 1: Portfolio of practical work:

This component will examine students' ability to deal with numerical data and make inferences using geostatistics. Several exercises will be set and formative feedback given during practical sessions.

Selected exercises will be assessed for the portfolio.

Element 2: Mini research project report (Group work):

This report will help students prepare for their field presentations.

Students will have an opportunity to decide on a research question and design a programme of research.

Literacy and engagement with academic literature will be assessed.

Formative work:

Component A – Students will receive feedback on their research plans both before and during the fieldtrip. Only a selection of the presentations that students complete on the fieldtrip contribute towards the summative assessment. Students will receive feedback after each presentation designed to improve performance on the

## STUDENT AND ACADEMIC SERVICES

remaining presentations.

Component B – Feedback will be given during practical sessions on work to be included in the portfolio. Students will have the opportunity for feedback on the findings of their mini research projects during project supervision tutorials.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B		25 %	Group research project report (1500 words)
Portfolio - Component B		25 %	Portfolio of work (1500 words)
Presentation - Component A	✓	50 %	Group fieldwork presentations
Resit Components	Final Assessment	Element weighting	Description
Report - Component B		50 %	Mini research project report (3000 words equivalent)
Presentation - Component A	<b>√</b>	50 %	Reworked research proposal presentation

Part 4: Teaching and Learning Methods						
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:					
	Module Learning Outcomes					
	Search and gather information from a variety of sources and critically review academic literature  Articulate relevant research questions and issues and produce insights, interpretations and solutions  Process information and data collected in the field or laboratory, including use of ICT					
	Work effectively within a group to conduct geological research					
	Develop, evaluate and carry out a variety of methods in geological research  Select and use appropriate statistical and graphical techniques for interpreting and comparing data collected in the field or laboratory					
	Present the outcomes of field and laboratory study in professional-level written and graphic (diagrams and maps) forms	l oral,	MO7			
	The same graphic (anagrams and maps) remis					
Contact Hours	Independent Study Hours:					
	Independent study/self-guided study 15					
	Total Independent Study Hours: 19		0			
	Scheduled Learning and Teaching Hours:					
	Face-to-face learning	150				

## STUDENT AND ACADEMIC SERVICES

	Total Scheduled Learning and Teaching Hours:	150		
	Hours to be allocated	300		
	Allocated Hours	300		
Reading List	The reading list for this module can be accessed via the following link:			
LiSt	https://uwe.rl.talis.com/index.html			

## Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Geology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Geology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19