

Liverpool John Moores University

Title: VOLCANOES, EARTHQUAKES AND SOCIETY
Status: Definitive
Code: **5106NATSCI** (112590)
Version Start Date: 01-08-2015

Owning School/Faculty: Natural Sciences & Psychology
Teaching School/Faculty: Natural Sciences & Psychology

Team	Leader
Silvia Gonzalez	Y
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Academic Level: FHEQ5 **Credit Value:** 24.00 **Total Delivered Hours:** 62.00
Total Learning Hours: 240 **Private Study:** 178

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	30.000
Practical	24.000
Workshop	6.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Exam	40.0	2.00
Presentation	Poster	Poster presentation - hazards	25.0	
Report	GIS Rpt	GIS hazard report	35.0	

Aims

To provide students with a broad understanding of volcanic processes, earthquakes and faulting and the resulting hazards and mitigation.

Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the tectonic processes associated with the origin of volcanoes, earthquakes and their associated hazards.
- 2 Describe, identify and interpret volcanoes and volcanic products in the field and in the laboratory.
- 3 Recognise & describe types of deformation (e.g. folding and faulting).
- 4 Discuss earthquake activity in the UK and in the world.
- 5 Demonstrate practical field skills appropriate to the study of volcanoes and tectonically active areas.
- 6 Discuss how to monitor and mitigate the effects of volcanic and earthquake activity.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Exam	1	2	4	6
Poster Presentation	1	4	6	
GIS Hazard assessment	2	3	5	

Outline Syllabus

Tectonics background. Introduction to volcanoes and earthquakes formation. Volcanoes and eruption styles. Origin and description of Earth deformation/earthquakes. Volcanoes and earthquakes - hazards and mitigation. Case studies from around the world. Volcanoes and earthquakes impact on society.

Learning Activities

Lectures, laboratory & paper practicals and fieldwork.

Notes

This module explores the consequences of tectonic activity in the form of earthquakes and volcanoes: their effects, products and mitigation.