

Volcanoes Earthquakes and Society

Module Information

2022.01, Approved

Summary Information

| Module Code | 5309NATSCI |
|---------------------|---------------------------------------|
| Formal Module Title | Volcanoes Earthquakes and Society |
| Owning School | Biological and Environmental Sciences |
| Career | Undergraduate |
| Credits | 20 |
| Academic level | FHEQ Level 5 |
| Grading Schema | 40 |

Teaching Responsibility

| LJMU Schools involved in Delivery | |
|---------------------------------------|--|
| Biological and Environmental Sciences | |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 20 |
| Practical | 22 |
| Workshop | 6 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| JAN-CTY | CTY | January | 12 Weeks |

Aims and Outcomes

| Aims | To provide students with a broad understanding of volcanic processes, earthquakes, deformation and faulting and the resulting hazards and mitigation. |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description | |
|------|--------|--|--|
| MLO1 | 1 | Discuss the tectonic processes associated with the origin of volcanoes, earthquakes and their associated hazards | |
| MLO2 | 2 | Model the effects of volcanic activity using GIS and evaluate the output | |
| MLO3 | 3 | Discuss the origin and nature of seismic activity | |
| MLO4 | 4 | Discuss how to monitor and mitigate the effects of volcanic and earthquake activity. | |

Module Content

| Outline Syllabus | Tectonics background. Introduction to volcanoes and earthquakes. 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. Individual Formative assessment on "seen exam question" preparation is provided. |
|------------------------|--|
| Module Overview | The aim of this module is provide you with a broad understanding of volcanic processes, earthquakes, deformation and faulting and the resulting hazards and mitigation. |
| Additional Information | This module explores the consequences of tectonic activity in the form of earthquakes and volcanoes: their effects, products, monitoring and mitigation. |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|-----------------|--------|--------------------------|------------------------------------|
| Centralised Exam | Exam | 50 | 2 | MLO1, MLO3, MLO4 |
| Report | Report | 50 | 0 | MLO1, MLO2 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|-----------------|--------------------------|-----------|
| Silvia Gonzalez | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
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