| Module code | SG-1205 | | | |
|-----------------|-------------------------------|------------------------|----|------------|
| Module Title | Introduction to Geology | | | |
| Degree/Diploma | Bachelor of Science (Geology) | | | |
| Type of Module | Major Core | | | |
| Modular Credits | 4 | Total student Workload | 10 | hours/week |
| | | Contact hours | 6 | hours/week |
| Prerequisite | None | | | |
| Anti-requisite | SG-1302 Physical Geology | | | |

Aims

The main aim of this module is to give students an understanding about the dynamic systems of the Earth, to understand and evaluate the key role of hydrogeologic and tectonic systems in making the Earth a dynamic planet. Students will also acquaint themselves with the formation of rock-forming minerals, petroleum generation and accumulation, natural hazards (e.g. earthquakes, tsunamis, volcanic activity, landslides) and to get a comprehensive idea about the dynamic systems of Earth and how we can protect ourselves from natural hazards.

Learning Outcomes

On successful completion of this module, a student will be expected to be able to:

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|----------------|---|---|--|
| Lower order : | 30% | understand the basic principles of geological processes acting on Earth | |
| | | get familiar with the basic minerals and rock types | |
| | | - general knowledge on the geological timescale | |
| Middle order : | 50% | - apply the gained knowledge in classroom | |
| | | - to test hypotheses and account for the behaviour and properties of Earth | |
| | | - use the skills on fieldwork examples | |
| Higher order: | 20% | - correlate observations and geological phenomena and to visualise different | |
| | | processes independently | |
| | | - work alone or in collaborative teams based on the gained skills | |

Module Contents

- Origin of the Universe, Solar System and Earth
- Earth's structure, rock forming minerals, rock-types, plate tectonics and their consequences
- Fossil and its preservation, dating and geologic time scale
- Weathering, wind, desert and coastal processes, landslides and mass wasting
- Hydrogeologic systems covering running water, groundwater and glacier

| Assessment | Formative | Practical tests, assignments and feedback |
|------------|--|---|
| | assessment | |
| | Summative | Examination: 60% |
| | assessment | Coursework: 40% |
| | - 1 class test and 1 field work report (20%) | |
| | | - 1 practical test (20%) |
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