

Module code	SG-1302		
Module Title	Physical Geology		
Degree/Diploma	Bachelor of Science (Geology)		
Type of Module	Major Option		
Modular Credits	4	Total student Workload	10 hours/week
		Contact hours	6 hours/week
Prerequisite	None		
Anti-requisite	SG-1205 Introduction to Geology		
<b>Aims</b> The main aim of this module is to give students an understanding about the dynamic systems of the Earth and 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.			
<b>Learning Outcomes</b> <i>On successful completion of this module, a student will be expected to be able to:</i>			
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	
<b>Module Contents</b> - 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 assessment	Practical tests, assignments and feedback	
	Summative assessment	Examination: 50%	
		Coursework: 50% - 2 class tests (30%) - 1 practical test (20%)	