

## COURSE OUTLINE

### (1) General

School:	Social Sciences		
Academic Unit:	Geography		
Level of studies	Undergraduate		
Course Code:	GEO 101	Semester:	A
Course Title:	Physical Geography - Geomorphology		
Independent Teaching Activities	Weekly Teaching Hours	Credits	
Lecture	3		
Laboratory practice	2		
	<i>Course total</i>	5	
Course Type:	Required		
Prerequisite Courses:	None		
Language of Instruction and Examinations	Greek		
Is the course offered to Erasmus students:	No		
Course Website (Url):	<a href="https://geography.aegean.gr/pps/index_en.php?content=0&amp;lesson=101">https://geography.aegean.gr/pps/index_en.php?content=0&amp;lesson=101</a>		

### (2) Learning Outcomes

#### *Learning Outcomes*

Upon completion of the course, the learner is expected to:

- Understand basic knowledge on physical geography concepts including lithosphere structure and earth processes that form landscapes and landforms
- Perceive the abiotic component on earth at temporal and spatial scale
- Understand the dynamics of the physical geography, geomorphology and hydrology systems and formations in relationship with the evolution of our planet, since its creation, the evolution of life on Earth, and the human impact on the abiotic environment

#### *General Competences*

1. Search for, analysis and synthesis of data and information, with the use of the necessary technology
2. Working independently
3. Team work
4. Respect for the natural environment

## 5. Production of free, creative and inductive thinking

### (3) Syllabus

This course examines the lithosphere and the causes of landforms. In particular, it examines the creation and dynamics of geo-physical, geomorphological, soil, hydrological systems and formations on earth within the historical frame of reference since the creation of planet earth, the appearance of life and the related human induced changes on earth's surface.

**INTRODUCTION.** The earth system and its processes. Earth's structure and geologic time. Earth's interior, Earth's crust and Plate Tectonics. Composition of the crust - Rocks and Minerals

**GEOMORPHIC PROCESSES.** Internal and external geomorphic processes. The geomorphic cycle.

**LANDFORMS and TECTONIC PROCESSES.** Orogenesis. Volcanoes, Crust deformation, Earthquakes.

**WEATHERING, MASS MOVEMENT and EROSION.** Physical and Chemical Weathering.

**WATER and LANDSCAPES.** Hydrologic cycle. Water distribution. Surface and underground water. Stream system, Fluvial landforms, Fluvial deposition,

**KARST GEOMORPHOLOGY**

Solution processes and karstic landforms

**GLACIAL SYSTEMS.** Glacier formation. Types of Glaciers. Glaciation features - erosional and depositional.

**EOLIAN LANDFORMS.** Wind erosion . Wind deposition.

**TECTONIC GEOMORPHOLOGY**

**VOLCANOES AND VOLCANIC STRUCTURES**

**THE GLOBAL OCEAN.** Introduction to the Oceans - Ocean margins - the Ocean floor - Tides and Waves

**COSTAL PROCESSES and LANDFORMS.** Coastal erosion landforms - Coastal deposition . Types of coasts.

**GEOSITES** Geomorphological heritage

### (4) Teaching and Learning Methods - Evaluation

**Delivery:** face to face

**Use of Information and Communication Technology:** Student contact electronically. Power point presentations.

#### Teaching Methods:

Activity	Semester workload
Lecture	39
Laboratory practice	26
Educational visit	8
Project	25
Non-supervised study	39
Performance evaluation/Exams	3

*Course total*

140

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Student Performance Evaluation

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(5) Attached Bibliography