Course Specifications

General Information

Course name	Geomorphology
Course number	GEOL2210
Faculty	
Department	
Course type	Major Needs
Course level	2
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Provide Students with the required information to be able to observe the landscape around them
2 - Understanding the earth's surface landforms
3 - The processes acting and reshaping the earth surface
4 - Understanding the the major landforms associated with geomorphological processes

Intended Learning Outcomes

Knowledge and Understanding	* Geomorphological landforms * Geomorphological processes
Intellectual Skills	* Students should be able to describe those landscapes using appropriate terminology
Professional Skills	* Students should be able to interpret landscape evolution as a function of time, space, and process
General Skill	* Students should be able to use topographic maps to recognize landforms and to measure, analyze, and interpret process from landforms and landscapes

Course Contents

1 - Introduction to Geomorphology and landforms
2 - Geomorphic materials and processes
3 - Weathering and related landforms
4 - Geomorphological Processes
5 - Coastal Landforms
6 - Gravitational Landforms
7 - Fluvial Landforms
8 - Aeolian landforms
9 - Karst landforms

Teaching and Learning Methods

1 - Two hours lecture meeting a week. Lectures will be interactive and will involve use of power point presentations, blackboard, and group discussions. Material will be posted on the web

Teaching and Learning Methods for the Disabled Students

1 - Two hours lecture meeting a week. Lectures will be interactive and will involve use of power point presentations, blackboard, and group discussions. Material will be posted on the web

Students Assessment

Assessment Method	TIME	MARKS
First midterm exam	6th week	25
Second Midterm exam	12th week	25
Final exam	16th week	50

Books and References

Course note	Lecture Notes
Essential books	Fundamentals of Geomorphology ” by Richard John Huggett
Recommended books	Environmental geomorphology, by Prof. Mario Panizza
	Encyclopedia of Geomorphology, Edited by A.S. Goudie
	Coastal geomorphology, by Eric Bird

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
Introduction to Geomorphology and landforms	1st	Definitions of Geomorphology	Structural Geomorphology and Climatic Geomorphology	Describing the Earth surface and developments	Understanding the definition of Geomorphology and the characteristics of climatic and structural Geomorphology
Geomorphic materials and processes	2nd	The processes that form and reshape the landscape	The main geomorphological process gravity, the wind, water, glacial	Distinguish between the main processes in terms of shape and stage	Understanding the major Geomorphological processes
Weathering and related landforms	3rd week	Weathering process and sediments formation .Erosion processes	Sediments formation and the main weathering processes Physical weathering Chemical weathering and Biological weathering	Weathering processes and characteristics	how weathering decomposes rocks and reshaping the earth surface
Geomorphological Processes	4th week	Description the measure Geomorphological Processes	Understanding the general processes: Coastal processes, Fluvial Processes, Aeolian Processes, Glacial processes, and Karst	Understanding the general Characteristics of each geomorphological processes	Provides the learner with the essential information about the geological processes and characteristics
Gravitational Landforms	5th week	Understanding the major landforms occur due to the effect of Gravity forces on Earths landscapes	Understand the different between falling, creep, subsidence, landslide, and flow	Provide the learner with the primary Mass movements processes	Understanding how gravity can be an essential geomorphological process
Gravitational Landforms	5th week	Understanding the major landforms occur due to the effect of Gravity forces on Earths landscapes	Understand the different between falling, creep, subsidence, landslide, and flow	Provide the learner with the primary Mass movements processes	Understanding how gravity can be an essential geomorphological process

Glacial landforms	6th week	Understanding the Glacial processes and landforms	Ability to identify the glacial landforms among several other landforms	Differentiate between erosion and depositional Glacial landforms	Understanding the Glacial deposition classified according to relative location to a glacier
Glacial landforms	6th week	Understanding the Glacial processes and landforms	Ability to identify the glacial landforms among several other landforms	Differentiate between erosion and depositional Glacial landforms	Understanding the Glacial deposition classified according to relative location to a glacier
Coastal Landforms	7th ,9th and 10th	Understanding the major coastal landforms Distinguishing between erosional and depositional coastal landforms	Provide the learner with the main characteristics of erosional coastal landforms beach drift and longshore currents	Identifying the coastal type and dominant geomorphological processes	Understanding the major coastal landforms
Aeolian landforms	11th and 12th week	Understanding the major Aeolian landforms	Provide the learner with the main characteristics of erosional Aeolian landforms Provide the learner with the main characteristics of depositional Aeiloan landforms	Distinguishing between erosional and depositional Aeolian landforms	Understanding the major Aeolian landforms
Fluvial Landforms	13th and 14th	Understanding the major Fluvial landforms Distinguishing between erosional and depositional Fluvial landforms	Provide the learner with the main characteristics of erosional Fluvial landforms. Understanding the general stages of River development and t main characteristics of each stage	Understanding the major Fluvial landforms Understanding the River Profile analy	Understanding the major Fluvial landforms and characteristics

Karst landforms	13th and 14th	Understanding the major Karst landforms and characteristics	Distinguishing between erosional and depositional Fluvial landforms	Understanding the general stages of Karst development characteristics	Understanding the major Karst landforms and characteristics
Revision	16th	Revision	Revision	Revision	Revision