

Programme	Semester 1	Course Code	GES-102	Credit Hours	3
Course Title	Physical Geography				
Course Introduction					
To create an understanding about the characteristics of four spheres of the earth, and the processes which are bringing changes in these spheres.					
Learning Outcomes					
On the completion of the course, the students will: 1. Digitization 2. Georeferencing 3. Satellite Images 4. Drone Cameras 5. Software Use					
Course Content			Assignments/Readings		
Week 1	Lithosphere				
	Plate tectonics, mountain building forces				
Week 2	Internal structure of earth				
	Rocks—origin, formation and types: Igneous, Sedimentary and Metamorphic Rocks				
Week 3	Geomorphic processes: Terrestrial and extra-terrestrial processes				
	An overview of the Geomorphic agents and there Landforms				
Week 4	Atmosphere				
	Composition and structure of Atmosphere				
Week 5	Atmospheric temperature and pressure,				
	Global circulation and wind systems				
Week 6	Cyclones and other Atmospheric disturbances				
	Atmospheric moisture and precipitation				
Week 7	Air masses and fronts				
	Hydrosphere				

Week 8	Hydrological cycle	
	Ocean composition, morphology	
Week 9	Temperature, salinity and other characteristics of ocean water	
	Movements of the ocean water; waves, currents and tides	
Week 10	Biosphere	
	Eco-systems	
Week 11	Formation and types of soils	
Week 12	Study and identification of landforms using Satellite imageries and Topographic Sheets.	
Week 13	Observation and recording of weather data from a weather station.	
Week 14	Isotherms, isobars, climographs, meteorological instruments, study of weather maps.	
Week 15	Construction of maps and diagrams, identification of rocks and minerals, methods of showing relief: contours (pattern, cross section).	
Week 16	Final Maps	
Textbooks and Reading Material		
1. King, C. A. M. (1980). Physical Geography. Oxford: Basil Blackwell. 2. Mcliveen, J. F. R. (1992). Fundamentals of Weather and climate. New Jersey: Prentice Hall.		

3. Monkhouse, F. J. (1996). Principles of Physical Geography. London: Hodder & Stoughton.
4. Peterson, J. F., Sack, D. & Gabler, R. E. (2011). Physical Geography. Brooks Cole.
5. Scott, R. C. (1996). Introduction to Physical Geography. New York: West Publishing Co.
6. Small, R. J. (1989). Geomorphology and Hydrology. London: Longman.
7. Strahler, A. (2013). Introduction to Physical Geography. New Jersey: John Wiley & Sons.
8. Strahlar, A. N., Strahlar, A. H. (2004). Physical Environment. New York: John Wiley,.
9. Stringer, E. T. (2004). Modern Physical Geography. New York: John Wiley.
10. Thornbury, W. D. (2004). Principles of Geomorphology. New York: John Willy & Sons,.
11. Thurman, H. V. & Trujillo, A. P. (2013). Essentials of Oceanography. New York: Prentice-Hall, Inc.
12. Tarbuck, J.E and Lutgens, K.F. 2000. Earth Science, 9 Editions, New Jersey: Prentice Hall.
13. Christopherson, W.R. 1997. Geosystems: An Introduction to the physical Geography, 3 Edition, New Jersey: Prentice Hall.
14. De Blij, H.J. 1995. The Earth: An Introduction to its Physical and Human Geography, 4 Edition, New York: John Wiley.
15. Lutgens, K.F and Tarbuck, J.E. 1995. The Atmosphere, 6 Editions, New Jersey: Prentice Hall.
16. Scott, C.R. 1989. Physical Geography, St. Paul: West Publication Company.

Teaching Learning Strategies

1. Lectures
2. Written Assignments
3. Quizzes
4. Lab Work

Assignments: Types and Number with Calendar

1. Practical
2. Quiz
3. Presentation
4. Assignment