

Generic Elective: Principles of Physical Geography

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title and code	Credits	Credit distribution of course			Eligibility Criteria	Pre-requisites of course, if any
		Lecture	Tutorial	Practical		
PRINCIPLES OF PHYSICAL GEOGRAPHY	4	3	1	0	Class12 th Pass in any discipline	NIL

Learning Objectives

The learning objectives of the course are as follows

- To explain the definition, nature and scope of the subject
- To recognize the structure and processes of the earth system
- To understand the composition and elements of the atmosphere

Learning Outcomes

The student will be able to:

- classify earth into various domains according to physical elements
- differentiate between lithosphere, atmosphere, hydrosphere and biosphere and understand their interrelationship
- appreciate the concept of the biosphere, biodiversity and conservation.

Unit 1: Physical Geography – Definition, nature and scope; relationship with other disciplines and contemporary relevance (10 hours).

Unit 2: Lithosphere – Interior structure of the earth; endogenetic and exogenetic forces; plate tectonics. (11 hours)

Unit 3: Atmosphere and Hydrosphere – Structure and composition; elements of climate (temperature, pressure and winds); general circulations; Hydrological cycle; ocean currents and tides (14 hours)

Unit 4: Biosphere- Genesis of soil and soil types; Major biomes of the world; Biodiversity – significance and conservation (10 hours)

References

1. Gautam, Alka (2019) *Bhoutik Bhugol*, Rastogi Publications, Meerut.
2. Gervais, B. (2019) *Living Physical Geography*, Second Edition, W.H. Freeman and Company, New York.
3. Khullar, D.R. (2018) *Physical Geography*, Kalyani Publications, New Delhi.
4. Lal, D.S. (2021) *Jalvayu avm Samundra Vigan*, Sharda Pustak Bhawan.
5. Lutgens, F.K., Tarbuck, E.C., and Dennis Tasa (2015) *Foundations of Earth Science*, Eight

Edition, Pearson India Education Services, Noida.

6. Saroha, J. and Singh, S. (2024) Physical Geography, Pearson Publication, Noida.

7. Singh, Savindra (2023) *Bhoutik Bhugol*, Pravalika Publications, Prayagraj.

8. Singh, Savindra (2023) Physical Geography, Pravalika Publications, Prayagraj.

9. Strahler, A. (2013) Introducing Physical Geography, Sixth Edition, John Wiley and Sons, New Jersey.