

DETAIL OF COURSES

Fundamentals of Geography

3(2+1)

Objective:

To expose students with the founding principles of Geography and geographical knowledge.

Course outline:

- Introduction
 - Definitions, scope and branches of Geography
 - Roots of the discipline and basic geographic concepts
 - Themes and traditions of Geography
 - Tools of Geography
- The Universe
 - Galaxies and solar system
- The Earth as a planet
 - Celestial positions, its shape and size
 - Rotation, revolution and related phenomena
- Spheres of the earth
 - Lithosphere
 - Atmosphere
 - Hydrosphere
 - Biosphere
- Man-environment interaction
 - Population
 - Major Economic activities
 - Settlements
 - Pollution

Lab. work:

Comprehension of atlases, map reading skills, location of places, features and relevant work related to topics of the theoretical section.

Recommended Books:

Arbogast, A. F. (2007) Discovering Physical Geography, John Wiley and Sons, London.

Christopherson, R. W. (2009) Geo systems: An introduction to Physical Geography, Pearson Prentice Hall, New Jersey.

De Blij, H. J and Muller, P. O. (1996) Physical Geography of the Global Environment, USA, John Wiley and sons Inc., New Jersey.

Guinness, J. P. & Nagle, G. (2011) Geography, Hodder Education, London.

King, C. (1980) Physical Geography, Basil Blackwell, Oxford.

Miller, G. T. (2008) Living in the Environment, Principles, connections and Solutions, Wadsworth, USA.

Monkhouse, F. J. (1996) Principles of Physical Geography, Hodder & Stoughton, London.
Scott, R. C. (1996) Introduction to physical geography, West Publishing Co, New York.
Small, R. J. (1989) Geomorphology and Hydrology, Longman, London.
Strahler, A. (2013) Introduction to Physical Geography, John Wiley & Sons, New Jersey.
Stringer, E. T. (2004) Modern Physical Geography, John Wiley, New York.
Taylor, J. (1993) Integral Physical Geography, Longman, London.
Thompson, R. D. (1986) Process in Physical Geography, Longman, London.
Thornbury, W. D. (2004) Principles of Geomorphology, John Wiley & Sons, New York.
Thurman, H. V. & Trujillo, A. P. (2013) Essentials of Oceanography, Prentice Hall Inc., USA.

Physical Geography

3(2+1)

Objective:

To create understanding about the physical characteristics of the earth

Course outline:

- Introduction
 - Definition, scope and major branches
 - Realms of the physical environment
- Lithosphere
 - Internal structure of earth
 - Rocks—origin, formation and types: Igneous, Sedimentary and Metamorphic Rocks
 - Plate tectonics, mountain building forces
 - Geomorphic processes – endogenic and exogenic processes and their resultant landforms
 - Earthquakes and volcanic activity, folding and faulting
 - Weathering, mass wasting, cycle of erosion, erosion and deposition
 - Landforms produced by running water, ground water, wind and glaciers
- Atmosphere
 - Composition and structure of atmosphere
 - Atmospheric temperature and pressure, global circulation
 - Atmospheric moisture and precipitation
 - Air masses and fronts
 - Cyclones and other disturbances
- Hydrosphere
 - Hydrological cycle
 - Ocean composition, temperature and salinity of ocean water

- Movements of the ocean water; waves, currents and tides
- Biosphere
 - Eco-systems
 - Formation and types of soils

Lab. Work:

Identification of rocks and minerals, study and identification of landform using Satellite imageries and Topographic Sheets. Construction and applications of models showing various types of landforms. Observation and recording of weather data from a mini weather station.

Field visits:

Ground truthing and identification of various types of rocks, fluvial, glacial, desert landform, type of soils.

Visit to any suitable area to observe and appreciate the characteristics of physical features (recommended areas: Mountainous, Plains, Plateaus, deserts and coastal areas).

Visit to any national park/biosphere reserves; Soil Survey of Pakistan, Geological survey of Pakistan, Meteorological station/observatory and National Institute of Oceanography (NIO) and SUPARCO.

Observations about the clouds and identification of their types

Recommended Books:

King, C. A. M. (1980) Physical Geography, Basil Blackwell, Oxford.

Mcliveen, J. F. R. (1992) Fundamentals of Weather and climate, Prentice Hall, New Jersey.

Monkhouse, F. J. (1996) Principles of Physical Geography, Hodder & Stoughton, London.

Peterson, J. F., Sack, D. & Gabler, R. E. (2011) Physical Geography, Brooks Cole.

Scott, R. C. (1996) Introduction to physical geography, West Publishing Co, New York.

Small, R. J. (1989) Geomorphology and Hydrology, Longman, London.

Strahler, A. (2013) Introduction to Physical Geography, John Wiley & Sons, New Jersey.

Strahlar, A. N., Strahlar, A. H. (2004) Physical Environment, John Wiley, New York.

Stringer, E. T. (2004) Modern Physical Geography, John Wiley, New York.

Taylor, J. (1993) Integral Physical Geography, Longman, London.

Thornbury, W. D. (2004) Principles of Geomorphology, John Willy & Sons, New York.

Thurman, H. V. & Trujillo, A. P. (2013) Essentials of Oceanography, Prentice-Hall, Inc, New York.

Human Geography

3(2+1)

Objective:

This course attempts to impart knowledge about the relationship between man and environment including natural resources and related human activities.

Course outline:

- Introduction
 - Definition, scope and branches
- Basic approaches
 - Environmental determinism
 - Possibilism
 - Probabilism
 - Cognitive behaviourism
 - Coupled nature-human systems
- Population and its characteristics
 - Population distribution
 - Population structure and composition
 - Population dynamics (fertility, mortality, migration etc.)
- Economic activities
 - Classification of Economic Activities

 - Agriculture, mining, forestry, animal husbandry and poultry
 - Industries: cottage, light and heavy
 - Trade, transport and services
 - Tourism
- Settlements
 - Theories of human settlement
 - Types of settlements
 - Rural settlements
- dispersed, nucleated and Ribbon settlements
- Urban Settlements
- Urban hierarchy and functions
 - Urbanization
 - Process of urbanization
 - Urban structure, morphology and theories
 - Land use and land cover patterns
- Environmental issues, causes and remedies

Field visits:

To explore economic activities in the context of natural environment of relevant area/region. To study rural and urban settlements, industrial areas and national parks.

Recommended Books:

- Ahmed, Q. S. (2001) Fundamentals of Human Geography, Royal Book Company, Karachi.
- Becker, A. & Secker. (2002) Human Geography: Culture, Society, and Space, John Wiley and Sons, New Jersey.
- Becker, A. & Secker. (2002) Human Geography: Culture, Society, and Space, New York; John Wiley and Sons, New Jersey.
- Benko, G. & Shorhmay. (2004) Human Geography: A history for the 21st century, Hodder Arnold, London.
- Blij, H. J. D. (2002) Human Geography: Culture, Society, and Space, John Wiley and Sons, New Jersey.
- Cloke, P. & Crang, P. (2005) Introducing Human Geographies, 2nd edition, Hodder Arnold, London.
- Fouberg, E. H. (2012) Human Geography People, Place and Culture, John Wiley & Sons, Inc., Hoboken.
- Getis, A. & Getis, J. (2005) Human Geography: Landscape of Human Activities, McGraw-Hill, Higher Education, Boston.
- Harper, H. L. (2003) Environment and Society: Human Perspectives on Environmental Issues. Prentice Hall, New York.
- Knox, P. L. & Marston, S. A. (2012) Places and Regions in Global Context: Human Geography, Prentice Hall, New York.
- Lewis, C. P., Mitchell F. & Dyer, C. (2001) Village, Hamlet and Field: Changing Medieval Settlements in Central England, Windgather Press, London.
- Neuwirth, R. (2006) Shadow Cities: A Billion Squatters, A New Urban World, Routledge, London.
- Rubenstein, J. M. (2012) Contemporary Human Geography, PHI Learning Private Limited, New Delhi.

Map Work

3(2+1)

Objective:

To train students in map drawing, reading and its use for geographical analysis

Course outline:

- Maps: its elements and types
- Principles and methods of map making, reading and reproduction
- Scale: types and their use, grid reference and indexation,
- Map projections: choice, construction, characteristics, and uses
- Enlargement and reduction of maps
- A study of the Survey of Pakistan maps
- Physical and cultural features to be described and interpreted
- Interpretation of weather maps of Pakistan

Field visits:

Visit to Survey of Pakistan and Pakistan Meteorological Departments.

Recommended Books:

Carey, H. H. (1983) How to Use Maps and Globes, Franklin Watts, New York.

Guljan, R. & Mushtaq, R. (1974) Map Projection, Oxford University Press, Oxford.

Kraak, M. J. & Ormelling, F. J. (1996) Cartography: Visualization of Spatial Data Harlow, Longman.

Robinson, A. H. (2002) Elements of Cartography, John Willey & Sons, New York.

Singh. L. & Raghunaadam, S. (1964) Map work and practical Geography, kalyani publishers, New Delhi.

Foundation-V GEOG 230 Geography of Pakistan**Objective:**

This course attempts to impart knowledge about the relationship between man and physical, socio-economic and cultural environment with special reference to Pakistan, including land, population, human settlements, resources and related human activities.

Course outline:

- Introduction
- Geo-strategic position of Pakistan
 - Location and Geographical significance
 - Geo-political Importance
 - Administrative setup
- Land and Physical Environment:
 - Physiography
 - Climate and climatic regions
 - Hydrology
 - Soils and vegetation
- The People
 - Population characteristics: structure, composition and distribution
 - Population Change
 - Urbanization
- Economy
 - Agriculture (crops and livestock)
 - Irrigation
 - Power and mineral resources
 - Industries
 - Trade
 - Tourism

- Transport and Communication
- Major challenges of Pakistan
 - Water, power, security and environmental issues

Lab. Work:

Survey, data collection and presentation on different thematic maps

Field visits:

To identify various physical regions and study of at least one region's land use, urban structure, mining area, national parks, industrial areas and various rural and urban settlements and other natural resources.

Recommended Books:

Ahmad, K. S. (1978) Geography of Pakistan, Oxford University Press, Oxford.

Burkey, J. S. (1991) Pakistan the continuing search for Nationhood, Western Press Oxford, UK.

Davidson, A. P. & Ahmad, M. (2003) Privatization and the Crisis of Agricultural Extension: The Case of Pakistan, King's Soas Studies in Development Geography, Ashgate Publishing, New Delhi.

Dichter, D. (1967) Geography of N-W.F.P, Oxford University Press, Oxford.

Hameed, A. (1972) Study of the Middle Indus Basin, San Francisco State College, San Francisco.

Johnson, B.L.C (198).

Khan, F. K. (1991) Geography of Pakistan, Oxford University Press, Karachi

Spate, O. H. K. (2004) India and Pakistan, Munshiram Mohoanlal Publications Pvt. Ltd., UK.

Tayyeb, A. (1973) A Political Geography of Pakistan, Oxford University Press. Oxford.