

B.A. Geography

DISTRIBUTION OF DIFFERENT COURSES AND CREDITS IN VARIOUS SEMESTERS

Offered By:

Department of Geography
Faculty of Arts
Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur

Course Code: GEO 101	
Course Title: Basics of Geography	
Credits: 2+0	
Unit	Topic
I	Meaning, Scope and branches of Geography, Earth Origin Theories: Classic and Modern, Origin of the Continent, Ocean and Atmosphere, Geological Time Scale.
II	Meaning & Scope; Evolution; Principles and Approaches of Human Geography; Elements of Human Geography with Special Reference to Jean Brunhes and Huntington.

Course Code: GEO 102	
Course Title: Physical Geography	
Credits: 4+0	
Unit	Topic
I	Nature, Scope & Branches of Physical Geography. Earth's Interior: Structure; Isostasy; Continental drift; Concept of Plate Tectonics.
II	Folding & Faulting, Earthquakes and Volcanoes types; Denudation; Fluvial Landforms.
III	Composition and structure of atmosphere; Vertical & Horizontal distribution of Temperature; Air Pressure and Winds. Koppen's Climatic Classification
IV	Major relief features of Ocean Basin; Temperature; Salinity and Major oceanic current; Coral Reefs & Atolls, Tide.

Course Code: GEO 103	
Course Title: Elements of Map reading and Interpretation	
Credits: 0+2	
Unit	Topic
I	Cartography – Nature and Scope; Scales-Comparative; Diagonal & Vernier Scale; Study and interpretation of Topographical Map (Mountain, Plateau & Plain) with the help of Cross and Longitudinal Profiles.
II	Map Projections- Classification and their Properties- Conical with Two Standard Parallel, Bonne's; Cylindrical Equal Area, Mercator's, Polar Zenithal Equal Area.

Course Code: GEO 104	
Course Title: Human Geography	
Credits: 4+0	
Unit	Topic
I	Man and Environment Relationships- Determinism, Possibilism, Neo-determinism, Evolution of Man, Man's Spread Over Globe During Pleistocene; Human Races.
II	World Tribes- Pygmies, Kirghiz, Eskimos, Bushmen, Indian Tribes- Gond, Gaddi, Tharu and Santhal;
III	Distribution of population, global migration causes and consequences, concept of over, under, and optimum population. Population Growth Theories: Malthus and Demographic Transition Theory
IV	Human Settlements: - Rural Settlements- Types and Patterns with Special Reference to India; Urban Settlements- Trend & Pattern of Urbanization in the World;

Course Code: GEO 105	
Course Title: Thematic, Weather and Geological Maps	
Credits: 0+2	
Unit	Topic
I	Maps – Classification and Types; Principles of Map Design. Diagrammatic Data Presentation – Line diagram,, Bar diagram and Circle diagram, Pie diagram
II	Thematic Mapping Techniques – Properties, Uses and Limitations; Maps Preparation- Isopleths, Choropleth, Dot
III	Weather Maps, Study and Interpretation of Indian Weather Map, Weather Forecasting.
IV	Geological Maps: Types, Signs, Bed and Bedding plane, Rock Outcrop, Dip, Strike etc. Construction of Geological Sections- Horizontal, Inclined and Folded.

Course Code: GEO 201	
Course Title: Environment, Disaster Management and Climate Change	
Credits: 4+0	
Unit	Topic
I	Environment: Concept and component; Ecosystem: Concepts, types & components, Trophic level and Energy flow, Concept of Biogeochemical Cycle;
II	Environmental Degradation; Causes and consequences of Deforestation, soil erosion; Pollution: Air & water pollution;
III	Environmental Hazard: Concept & typology; Earthquake, Flood, Cyclone & Drought; Concept of Disaster Management.
IV	Climate Change, Green house effects & Global warming, Ozone depletion.

Course Code: GEO 202	
Course Title: Statistical Techniques in Geography	
Credits: 0+2	
Unit	Topic
I	Types & Sources Data in Geography; Significance of Statistical Methods in Geography; Scales of Measurement (Nominal, Ordinal, Interval, Ratio)
II	Tabulation and Illustration: Frequency Distribution Table, Cross Tabulation, Graphical Presentation of Data; Histograms, Frequency Curve and Cumulative Frequency Curves,
III	Measurement of Central Tendencies ; Mean, Median Mode and Standard Deviation, Z score
IV	Correlation: Rank Correlation and Simple Regression

Course Code: GEO 203	
Course Title: Economic Geography	
Credits: 4+0	
Unit	Topic
I	Meaning, concepts and approaches of Economic Geography; Resources: meaning, concept and classification.
II	Types of Economic Activities; Distribution and Production of Major Crops: Wheat, Rice, and Tea; Agricultural region of the world of DerwentWhittlesey. Agricultural and land use model of J.H.VonThunen.
III	Distribution and Production of Minerals: Iron ore, Coal and Petroleum. Theory of industrial location (Alfred Weber),Types of industries; Distribution of Iron & steel industryand Cotton textiles with reference to USA, Western Europe and Japan,
IV	WTO and International trade: Patterns and trends. Effect of globalization on developing countries..

Course Code: GEO 204	
Course Title: Surveying	
Credits: 0+2	
Unit	Topic
I	Meaning, Types of Surveying's, Measurements Scale
II	(i) Plane Tables Survey- Radial, Intersection and Traverse Methods (ii) Prismatic Compass Survey- Radial, Intersection and Traverse Methods (iii) Indian Clinometer (iv) Sextant

Course Code: GEO 301	
Course Title: Regional Geography	
Credits: 4+0	
Unit	Topic
I	Definition of Region, Formal, Functional and Planning Region Criteria for the delineation of Region.
II	Concept of Regional planning. Types of Regional planning Need for regional planning in India.
III	Theories and Models for Regional Planning: Growth Pole Model of Perroux; Myrdal and Rostow
IV	Concept of development and under development; Indicators of development: Economic, Social and Environmental. Sustainable Development.

Course Code: GEO 302	
Course Title: Basics of Remote Sensing and GIS	
Credits: 4+0	
Unit	Topic
I	Meaning, Definition & History of Remote Sensing, Types of sensor
II	Remote Sensing Mechanism; Principles of Remote Sensing, EMR Interaction with Atmosphere and Earth Surface
III	GIS Introduction, Definition and Components, Data Types of spatial and Non-spatial, Raster, Vector Data and Attribute data
IV	History of Aerial Photography, Principle, Types and Geometry of Aerial photograph; Introduction of Satellite derived Data.

Course Code: GEO 303	
Course Title: Tour and Tour report	
Credits: 0+2	
Unit	Topic
I	Various aspects of study in Field Tour, Preparation of Surveying in Field Study, Methods for preparing field report/ Educational Excursion Report.

Course Code: GEO 304	
Course Title: Project Report-1	
Credits: 0+3	
Unit	Topic
I	Meaning, types and significance of Research, Literature review, Research problem, objectives, and formulation of research design.
II	Sources of Data: Primary and Secondary; Sampling: Probability and Non Probability. Research methods
III	Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and key words

Course Code: GEO 305	
Course Title: Geography of India	
Credits: 4+0	
Unit	Topic
I	Physiography; Drainage; Origin and mechanism of Indian Monsoon; Koppen's Climatic Classification; Soils & Natural Vegetation.
II	Population Growth, Distribution and Pattern; Major Agricultural Crops- Paddy, Wheat, Cotton and Tea, Agricultural Region; Green Revolution.
III	Industry: Evolution of industries;; Major Industries: Iron & steel, Cotton Textiles, Industrial regions, Mineral Resources – Iron- ore, and Power Resources - Coal, Petroleum, Non-conventional power resource
IV	Settlements: rural/ & urban settlements Types and pattern; Functional classification of Indian town; Urbanization in India- Problems and Prospects

Course Code: GEO 306	
Course Title: Evolution of Geographical Thoughts	
Credits: 4+0	
Unit	Topic
I	Development of Geography in ancient period, Indian Geographical Knowledge during Vedic, Epic and Puranic Period. Contributions Indian Geographer; Contributions of Greek and Roman Geographers; Contribution of Arab geographers.
II	Renaissance and Period of Geographical Discoveries; German School of Geography: Contribution of Humboldt, K. Ritter, F. Ratzel, French School of Geography, Contribution of VDL Blache and J. Brunhes.
III	Contribution of Soviet Geographers, American School- Contribution of Davis, Semple, Huntington, Carl Sauer; British School- Contribution of Mackinder, Herbertson and L.D.Stamp.
IV	Nature and Scope of Geography, Dualism in Geography, Recent Trends of Geography, Progress of Geography of India.

Course Code: GEO 307	
Course Title: Remote Sensing and GIS	
Credits: 0+2	
Unit	Topic
I	Concepts of Aerial-photogrammetry; Introduction to Elements of Photographic System: Scale, Concept of Relief Displacement, Image Parallax, Ortho Photo.
II	Introduction of GIS; Data Types: spatial and Non-spatial, GPS: Fundamentals, Types and Uses
III	Image Processing (Digital/ Manual) and Data Analysis; Geo-Referencing Radiometric and Geometric Correction, Classification: Supervised and Un-supervised; Topology: concept and type
IV	Interpretation of satellite derived data and Application of Remote Sensing and GIS: Land use/ Land Cover Analysis

Course Code: GEO 308	
Course Title: Project Report 2	
Credits: 0+3	
Unit	Topic
I	Project report shall be on Socio-Economic Survey as per the study area.3