LESSON PLAN

For HS 1st year, TDC 1st, 3rd, 5th and PG 1st and 3rd semesters.

DR.HAHI RAM LAHKAR .M.A. PhD.

Department of geography

Class/ Semester	**Topics**	**Allotted class**	**Already thought**	**Remarks**
H.S.1styear	Location of India	2	yes	Satisfactory
	Physiographic of India	8	yes	Satisfactory
	Climate of India	2	yes	Satisfactory
	Soil distribution of India	1	yes	Satisfactory
	Vegetation of India, Types and Distribution	2	yes	Satisfactory
	Drainage patterns and Distribution	2	yes	Satisfactory
	Practical, latitude and longitude, Time zones etc.	4	yes	Satisfactory
NEP BA 1ST SEM	Evolution and growth of Physical geography	14	yes	Satisfactory
	Growth of nature-centric geography; evolution and trend of Physical Geography as a study of earth process systems; meaning, scope and nature of Physical Geography; branches of Physical Geography; Physical geography and its interdisciplinary nature			
	India's location and its significance, Administrative divisions	2	Yes	Satisfactory

TDC 3rd Semester (Honours)	Physical setting: physiographic divisions and their characteristics, climate and it's seasonal and regional	20		
	Vegetation , Soil types and its distributions	4	Yes	Satisfactory
	Population: Trend of growth, spatial variation in growth and distribution,	6	Yes	Satisfactory
	age and sex composition , linguistic and religious composition,		Yes	Satisfactory
	Industry: Distribution and pr0duction patterns of Iron and steel, cotton textile and fertilizers and role of transport systems in industrial development.	8	Yes	Satisfactory
3rd semester generic	Economic geography Meaning and scope, Development ,	4	Yes	Satisfactory
	Approaches of economic geography	4	Yes	Satisfactory
5th semester Major	Paper :502 Locational significance, Unity And diversity Physical Environment: Physiographic characters- Climate,	2	Yes	Satisfactory

	Soil, and Natural vegetation	12		
	Population characters: Peopling growth, Distribution, density, Structure and composition.	8	Yes	Satisfactory
	Agriculture: Agricultural development and Indian economy, Modernization of Indian Agriculture, Agro –Climatic regions and special characterics, Agricultural trades.	8	Yes	Satisfactory
	Transports: Roads and Railways, Air transport and pipelines.	4	Yes	Satisfactory
P G 1st semester	History of Geomorphic ideas, Recent trends in Geomorphology	6	Yes	Satisfactory
	Theoretical basis of Geomorphology: Uniformitarian's and catastrophism, System concept in Geomorphology, steady state, and dynamic equilibrium.	10	Yes	Satisfactory

	Concept and techniques in applied Geomorphology. Fluvial Geomorphology, paleo geomorphology, Environmental Geomorphology.	10	Yes	Satisfactory
P G 3rd semester	Population Geography , Meaning and scope , Development , Population trend , population growth, Malthus's theory	4 4	Yes	Satisfactory

Lesson Plan

CBCS-based U.G.Course in Geography (BA/BSc Honours.3rd Semester)

Course Name: Cartographic Techniques (Practical)

Paper Code: GGY-HC-3016,3026 &3036

Sl.no	paper	Topics	Time duration	Expected date of completion
1	3016 (HC) 3066 (GE)	Moving Average method	2 hours	By March 15th, 2023
2		Band Graph	2 hours	
3		Bar Graph	2 hours	
4		Traffic Flow Cartogram	2 hours	
5	3026	Trend of population growth	2 hours	
6		Choropleth mapping	2 hours	
7		Pie-graph	2 hours	
8		Band Graph	2 hours	
9		Map showing the distribution of Major Tribal groups of N-E India	2 hours	
10	3036	Tabulation of data,Histogram,Frequency polygon and Frequency curve	2 hours	
11		Time series analysis:Moving average and Least squares method	2 hours	

Lesson Plan

CBCS-based U.G.Course in Geography (BA/BSc 3rd Semester)

Course Name:Thematic Cartographic (Practical)

Paper Code: GGY-SEC(HC)-3054,

GGY-3034-SEC(Reg)

Sl no	paper	Topics	Time duration	Expected date of completion
1	3054 (SEC,Hon) 3034 (SEC,Reg)	Thematic maps:Choropleth,Isopleth,dot,Sphere and Proportionate circles	2 hours	By March7th ,2023
2		Interpretation of topographical maps	2 hours	
3		Isochronic cartogram	2 hours	
4		Visual Interpretation of satellite imagery.	2 hours	

Lesson Plan (NEP)

Geography (BA/BSc 1st Semester)

Course Name: Introduction to Physical Geography

Sl. No	UNIT	TEACHERS Name	Topic	No of Classes	Time Duraion	Expected date of completion
1	Unit I:	Dr. Hahiram Lahkar	Evolution and growth of Physical geography	14	One hour	November 15th 2023
			Growth of nature-centric geography; evolution and trend of Physical Geography as a study of earth process systems; meaning, scope and nature of Physical Geography; branches of Physical Geography; Physical geography and its interdisciplinary nature.			
2	Unit II:	Dr. Hemanta Kumar Nath	Geomorphology	12	One hour	
			Meaning, scope and significance of geomorphological studies. fundamental concepts in geomorphology: catastrophism, uniformitarianism, and Davisian concept of landform development			
3	Unit III:	Dr. Pranab Jyoti Sarma	Climatology	13	One hour	
			Meaning, scope and significance of climatological studies. Fundamental concepts in Climatology: insolation and heat budget, temperature, pressure and precipitation relationship; pressure and wind systems.			
4	Unit IV:	Mr. Rajib Malo	Oceanography	07	One hour	
			Meaning, scope and significance of oceanographic studies; fundamental concepts in oceanography: origin of ocean basins, the origin of ocean currents, temperature and salinity relationship.			
5	Unit V:	Dr. Mainu Goswami	Biogeography	14	One hour	
			Meaning, Scope and Significance of biogeographic studies; fundamental concepts in Biogeography: biosphere, ecology, Ecosystem, biodiversity			

LESSON PLAN

For HS 1st year, TDC 1st, 3rd, 5th and PG 1st and 3rd semesters.

Dr. Hemanta Kumar Nath .M.A. PhD.

Department of geography

Class/ Semester	**Topics**	**Allotted class**	**Already thought**	**Remarks**
H.S.1styear		2	yes	Satisfactory
		8	yes	Satisfactory
		2	yes	Satisfactory
		1	yes	Satisfactory
		2	yes	Satisfactory
		2	yes	Satisfactory
		4	yes	Satisfactory
NEP BA 1ST SEM	Geomorphology	12	yes	Satisfactory
	Meaning, scope and significance of geomorphological studies. fundamental concepts in geomorphology: catastrophism, uniformitarianism, and Davisian concept of landform development			
TDC 3rd Semester		2	Yes	Satisfactory
	Physical setting: physiographic divisions and their characteristics, climate and it's seasonal and regional	20		
	Vegetation , Soil types and its	4	Yes	Satisfactory

(Honours)	distributions			
	Population: Trend of growth, spatial variation in growth and distribution,	6	Yes	Satisfactory
	age and sex composition , linguistic and religious composition,		Yes	Satisfactory
	Industry: Distribution and pr0duction patterns of Iron and steel, cotton textile and fertilizers and role of transport systems in industrial development.	8	Yes	Satisfactory
3rd semester generic	Economic geography Meaning and scope, Development ,	4	Yes	Satisfactory
	Approaches of economic geography	4	Yes	Satisfactory
5th semester Major	Paper :502 Locational significance, Unity And diversity Physical Environment: Physiographic characters- Climate, Soil, and Natural vegetation	2 12	Yes	Satisfactory
	Population characters: Peopling growth, Distribution, density, Structure and composition.	8	Yes	Satisfactory

	Agriculture: Agricultural development and Indian economy, Modernization of Indian Agriculture, Agro –Climatic regions and special characterics, Agricultural trades.	8	Yes	Satisfactory
	Transports: Roads and Railways, Air transport and pipelines.	4	Yes	Satisfactory
P G 1st semester	History of Geomorphic ideas, Recent trends in Geomorphology	6	Yes	Satisfactory
	Theoretical basis of Geomorphology: Uniformitarian's and catastrophism, System concept in Geomorphology, steady state, and dynamic equilibrium.	10	Yes	Satisfactory
	Concept and techniques in applied Geomorphology. Fluvial Geomorphology, paleo geomorphology, Environmental Geomorphology.	10	Yes	Satisfactory
P G 3rd semester	Population Geography , Meaning and scope , Development , Population trend , population growth, Malthus's theory	4 4	Yes	Satisfactory

LESSON PLAN

For HS 1st year, TDC 1st, 3rd, 5th and PG 1st and 3rd semesters.

Dr. Mainu Goswami .M.A. PhD.

Department of geography

Class/ Semester	**Topics**	**Allotted class**	**Already thought**	**Remarks**
H.S.1styear	Geography as a disipline	2	yes	Satisfactory
	Geography relation with other social sciences.	5	yes	Satisfactory
	Disasterb : Natural and man - made	2	yes	Satisfactory
(NEP) BA 1ST SEM	Biogeography	14	yes	Satisfactory
	Meaning, Scope and Significance of biogeographic studies.	6		
	Fundamental concepts in Biogeography: biosphere, ecology, Ecosystem, biodiversity	5	Yes	Satisfactory

TDC 3rd Semester (Honours/Generic)	Field study : Methods and techniques Field report: Primary and secondary data collection. Data interpretration and analysis	9 7	Yes	Satisfactory
	Manufacturing: Factors influencing industrial location; types of industry; Factors, distribution and production of iron and steel and cotton textile industry in the world.	6	Yes	Satisfactory
	Transport system: Modes of transport, factors influencing transport development and role of transport in resource mobilization and industrial development	7	Yes	Satisfactory
	Trade: Factors influencing trade; Trade relations of India with the countries like Bhutan, Nepal and Bangladesh	8	Yes	Satisfactory
5th semester Major	Definition of Region : Evolution and Types of Regional planning: Formal, Functional, and Planning Regions and Regional Planning; Need for Regional Planning; Types of regional Planning. Choice of a Region for Planning: Characteristics of an Ideal Planning Region.	2 6 6	Yes	Satisfactory

	Delineation of Planning Region; Regionalization of India for Planning (Agro Ecological Zones).	8	Yes	Satisfactory
	Theories and Models for Regional Planning: Growth Pole Model of Perroux; Growth Centre Model in Indian Context; Myrdal, Hirschman, Rostow and Friedmann; Village Cluste.	8	Yes	Satisfactory
P G 1st semester	Defining the field of Biogeography; Its significance, development and approaches	6	Yes	Satisfactory
	Bio-energy cycles and food-chain	10	Yes	Satisfactory
	Concept of Bio-diversity; Conservation of forest and wild life.	10	Yes	Satisfactory
P G 3rd semester	Themes and concepts in cultural geography: cultural hearth, cultural area, cultural region, cultural landscape, cultural history, cultural ecology, cultural diffusion and cultural integration.	4	Yes	Satisfactory

	Defining the field of social geography; development of social geography in AngloAmerican countries and India. Concept of social space, social group, social structure, social differentiation, social diversity, plurality, socio-spatial inequalities, social well-being	7		Satisfactory

LESSON PLAN

For HS 1st year, TDC 1st, 3rd, 5th and PG 1st and 3rd semesters.

Dr. Pranab Jyoti Sarma .M.A. PhD.

Department of geography

Class/ Semester	**Topics**	**Allotted class**	**Already thought**	**Remarks**
H.S.1styear	Nature and scope of Geography	2	yes	Satisfactory
	Climate and weather	5	yes	Satisfactory
	Climatology	14	yes	Satisfactory

(NEP) BA 1ST SEM	Meaning, Scope and Significance of Climatological studies. Factors impact on difference type of Climatic in all over the world.	6		
TDC 3rd Semester (Honours/Generic)	Quantification and its significance in geographical study; advantages and limitations of quantitative methods in geography. Geographical Data: Nature, types and sources; scale of measurement (nominal, ordinal, interval and ratio).	7	Yes	Satisfactory
	Measures of central tendency (mean, median and mode) and dispersion (range, quartile deviation, mean deviation, standard deviation and coefficient of variation) and their applications in geographical data analysis. Sampling techniques: meaning of sampling and its need; types of sampling (simple random and stratified random).	9 7	Yes	Satisfactory
	Time series analysis and its applications in geographical studies; Basic techniques of time series data analysis (semi-average, moving average and least squares).	6	Yes	Satisfactory

	Correlation and Regression Analysis: Meaning of correlation; Bi-variate coefficient of correlation (Spearman's rank correlation and Pearson's product-moment correlation); linear regression analysis; and their applications in geographical data analysis.	7	Yes	Satisfactory
	Tabulation/Grouping of geographical data for making frequency distribution table; Preparation of Histogram, Frequency Polygon and Frequency Curve.	8	Yes	Satisfactory
5th semester Major	Defining the Field and Identifying the Case Study – Rural / Urban / Physical / Human / Environmental. Field Tools and Techniques – Merits, Demerits and Selection of the Appropriate Technique; Observation (Participant / Non Participant), Questionnaires (Open/ Closed / Structured / Non-Structured); Interview with Special Focus on Focused Group Discussions; Space Survey (Transects and Quadrants, Constructing a Sketch)	2 6 6	Yes	Satisfactory
	Field study (within the country/neighbouring countries) and preparation of field report – Aims and Objectives, Methodology, Analysis, Interpretation.	8	Yes	Satisfactory

	Surveying: Concept of ground surveying, Plane and Geodetic Surveying, Conduct of Surveying using Plane Table (Radial Method and Intersection Method) and Prismatic Compass (Open Traverse and Closed Traverse).	8	Yes	Satisfactory
P G 1st semester	Defining the field of Climatology; Importance of Climatology in geographical studies. Climate and Weather; Elements of Weather; factors influencing climate.	6	Yes	Satisfactory
	Insolation; atmospheric temperature; horizontal and vertical distribution of temperature	10	Yes	Satisfactory
	Climatic disturbances: cyclones, anticyclones, cloud bursts, drought Classification of World Climate: Schemes of Koppen and Thornthwaite. Monsoons: Mechanism of development, Distribution of monsoons, Trajectories and Irregularities, Effects of El-Nino, Walker oscillation, etc	10	Yes	Satisfactory

P G 3rd semester	Methodological developments in geography: quantitative and qualitative; significance of quantification in geographical analysis; limitations of quantitative techniques. Geographic data matrix; nature and types of geographic data, levels of measurement, data source and acquisition techniques.	4 7	Yes	Satisfactory Satisfactory

LESSON PLAN

Mr. Jayanta Kumar Das

Department of Geography, Morigaon College.

- B.A/B.SC

Class	No. of Students	Paper Code	Topic / Class taken	Tools use
B.A 1stSem.(NEP)	Core (1/2/3) 120	GGY-HC-1016	1. Defining the field geography: Meaning and Scope; Nature of human geography and its relation with other social sciences. (5 classes) 2. Geography as a whole (Climatology, Biography, Oceanography ,etc) 4. Man and environment relationship: Impact of environment on man in different geographical conditions; Impact of man and its activities on environment in different parts of the world; Impact of Population growth on development and environmental degradations; House types in different environmental conditions.	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.

B.A 3rd Sem.(H)	54	GGY-HG-3016	1. Field of human geography: meaning, scope and importance. (8 classes) 2. Concepts of man-environment relationship: Determinism and Possibilism. (8 classes) . 3. Impact of environment on man; impact of man on environment; population growth and environmental changes; house types in different environmental conditions. (10 classes)	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.
		(practical)	1. Traditional house types of selected ethnic groups of North-East India. (4 classes) (1 assignment) 2. Trend of population growth in the world in relation to five most populous countries of the world using line graph. . (4 classes) (1 assignment. 3. Religious composition of population in the world and three most populous countries of the world using pie-graph. (4 classes) (2 assignments).	

Class	No. of Students	Paper Code	Topic / Class taken	Tools use
B.A 5th SEMESTER(H)	48	GGY-HC-5016	1. Environmental Geography – Concept, Scope and Significance. 2. Human-Environment Relationships – Historical Progression, Adaptation in different Biomes. 3. Eco-system: concept, types and components, structure and functions; Ecology– Concept and principles. 4. Major Global Environmental Problems: Pollution, Deforestation, Desertification, Global Warming, Bio-Depletion.	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.
		GGY-HC-5026	6. Definition, Nature and scope, Criteria for delimitation. 7. Urban Settlements: Census categories, Metropolitan concept, City-region and Conurbation, Urban Landuse.	
		GGY-HC-5036	1. Remote Sensing and GIS: Definition and Components, Development, Platforms and Types, 2. Aerial Photography and Satellite Remote Sensing: Principles, Types and Geometry of Aerial Photograph; Principles of Remote Sensing, EMR Interaction with Atmosphere and Earth Surface; Satellites (Landsat and IRS) and Sensors.	

Class	No. of Students	Paper Code	Topic / Class taken	Tools use

B.A 5th sem	31	GGY-HE-5026	Hydrology 1. Hydrological Cycle: Systems approach in hydrology, human impact on the hydrological cycle; Precipitation, interception, evaporation, evapo-transpiration, infiltration, groundwater, run off and over land flow; Hydrological input and output. 2. River Basin Characteristics & Problems (Flood & Drought)	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.
		GGY-HC-5016	5. Trends – Quantitative Revolution and its Impact, Behaviouralism, Systems Approach, Radicalism, Changing Concept of Space in Geography, Future of Geography.	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.
		(practical)	Semiar Presentration , field survey report presentration	Powerpoint presentration

MA. /M.Sc (1st and 2nd SEM)

Class	No. of Students	Paper Code	Topic / Class taken	Tools use
P.G 1st Sem	16	GGY1036	5. Man and Atmosphere: man as a factor of climate change; industrialization-urbanization and climate; greenhouse effect and global warming. (5 lectures) 6. Development processes: Nature and trend of development-global and national perspective (4 lectures) 7. Environment and Development: concept of environment and development; sustainable development. (5 lectures) 8. Global Environmental Problems: types and extent of environmental problems, areaspecific major environmental issues and problems. (5 lectures) 9. Environmental Pollution: factors of environmental pollution; types of pollution; major areas of environmental pollution; effects of environmental pollution. (6 lectures) 10. Environmental Hazards and Disaster: meaning and types; tectonic disasters; climatic hazards; flood hazards with special reference to floods of Brahmaputra and Barak valleys, Assam. (8 lectures)	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.

		GGY1046	1. Defining the field of settlement of geography; its development trend, significance and approaches (4 lectures) 2. Origin and growth of rural and urban settlements; Characteristics of rural and urban settlements; Spatial patterns of settlements. (8 lectures) 3. Morphology of rural and urban settlements; theories related to internal structure of urban settlements; distance-decay rule in urban context (8 lectures)	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.

Class	No. of Students	Paper Code	Topic / Class taken	Tools use
P.G 3rd sem	13	GGY3176	1. Anthropogenic (green house-Kyoto gases) and natural radioactive forcing (Solar cycles-Milankovich cycle) (5 Lectures) 2. Atmospheric circulation, El Niño Southern Oscillation (ENSO), Walker Circulation, Indian Ocean dipole clouds, aerosols. (8 Lectures) 3. Evaluation of climate models, climate projection and prediction (5 Lectures) 4. Climate change: Impacts, vulnerabilities, adaptation and mitigations strategies: global, sectorial, regional) (8 lectures) 5. Organization and policies: IPCC, UNCOP, ISA, NAPCC, INCCA (4 Lectures)	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.
		GGY3193 (practical)	1. Fundamentals of Photogrammetry: determination of photo scale, object height, slope between two points and relief displacement (4 exercises) 2. Interpretation of aerial photographs and preparation of land use map, settlement map and road map (4 exercises) 3. Interpretation of satellite imagery and preparation of land use/ land cover and fluvialgeomorphic maps (4 exercises).	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.

		GGY3223 GGY3523	1. Human impact on river basins and fluvial systems: effects of land use/Land cover changes and dam construction on channel hydrology, morphology and catchment ecosystem. (6 lectures) 2. Fluvial –geomorphic hazards: flood and bank erosion, sedimentation, landslides and soil erosion. (6 lectures) 3. Fluvial Geomorphology of the Brahmaputra Valley, floodplain characteristics, channel bars and islands, geomorphology of Majuli island. (8 lectures) 4. Fluvial Geomorphology of wetlands of Brahmaputra floodplain (3 lectures) 5. Eco-geomorphology: catchment ecosystem and restoration, riparian vegetation and hydrological processes, river basin planning and development (4 lectures) 6. Climate change, basin hydrology and river process (3 lectures). Fluvial Geomorphology (Dissertation) Presentration, Seminar.	DIGITAL CLASS, BLACK BOARD, MAPS, ASSIGNMENT.