Curriculum Plan

of

Mr. Nabanu Roy

Session: 2023-2024

Department of Geography **January to June (Even Semesters)**

Month		Semesters	Title of the Topics	Sub Topics	No. of Classes	Remarks
JANUARY	2ND SEMESTER	2nd Sem- MAJOR (Theory)	Settlement geography	Definition, nature, scope and content of settlement geography; Concept of site and situation	8	8 class lectures
		2nd Sem -MAJOR (Practical)	Scale	Construction of Diagonal scale	3	3 class lectures
		2nd Sem - SEC (Theory)	Sustainable development;	Definition and concept of sustainable development; Elements of sustainable development	6	6 class lectures
		2nd Sem-SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Interior of the earth; Continental drift & Plate tectonics theory; Folds and faults	Interior of the earth; Continental drift theory by Wegener; Plate tectonics; Folds and faults	6	5class lectures & 1 map observation session
		2nd Sem-MINOR (Practical)	Scale	Definition and types; Construction of linear Scale	3	3 class lectures
	4TH SEMESTER	4th Sem-DSC (Theory)	Spatial Information Technology (SIT)	Definitions, concept and historical development of SIT	6	6 class lectures
		4th Sem - DSC (Practical)	Aerial Photographs	Identification of broad physical features from aerial photographs using pocket stereoscope	2	2 class lectures
		4th Sem - SEC	Geographical Information System	Definition and Components of GIS	4	3 class lectures &1 PPT based classes
		4th Sem-GE (Theory)	Physiography, Climate, Natural Vegetation and Soil	Physiography, Climate, Natural Vegetation and Soil	6	6 class lectures
		4th Sem -GE (Practical)	Geological map	Uniclinal structure with given dips	2	2 class lectures
	6TH SEMESTER	6th Sem - DSE (Theory)	Climate change	Concepts and implications; Greenhouse effect	6	6 class lectures
		6th Sem - DSE (Practical)	Project Report	Project Report based on impact and adaptation to climate change	2	2 class lectures
		6th Sem - SEC	GIS	Definition and Components of GIS	4	3 class lectures & 1 PPT class

FEBRUARY	**2ND SEMESTER**	2nd Sem -MAJOR (Theory)	Settlements	Origin and growth of rural and urban settlements. Types, patterns and distribution of rural settlements; Morphology of rural settlements	9	7 class lectures, 1 doubt clearing session & 1 PPT based class
		2nd Sem -MAJOR (Practical)	Scale	Scale: Construction of Vernier scale	3	3 class lectures
		2nd Sem -SEC (Theory)	Sustainability and Global issues related to sustainable development	Social sustainability, economic sustainability and environmental sustainability; Global issues related to sustainable development like deforestation	6	6 class lectures
		2nd Sem -SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Weathering and mass movement; Erosional and depositional landforms:	Weathering and mass movement; Erosional and depositional landforms: Fluvial, Glacial and Aeolian.	6	6 class lectures
		2nd Sem-MINOR (Practical)	Scale	Construction of comparative and diagonal scale	3	3 class lectures with final signature
	4TH SEMESTER	4th Sem-DSC (Theory)	Spatial Information/Data	Web data sources; registration and projection	6	6 class lectures
		4th Sem - DSC (Practical)	Aerial Photographs	Identification of broad cultural features from aerial photographs using pocket stereoscope	2	2 class lectures
		4th Sem - SEC	Global Positioning System (GPS)	Principles and uses of GPS	4	4 class lectures
		4th Sem-GE (Theory)	Settlements	Types of settlements, morphology of rural and urban settlements	6	6 class lectures
		4th Sem -GE (Practical)	Geological map	Folded structure with given dips	2	2 class lectures
	6TH SEMESTER	6th Sem - DSE (Theory)	Climate change	Global warming and IPCC	7	6 class lectures & 1 class for library work
		6th Sem - DSE (Practical)	Project report	Pre field activities	2	2 class lectures
		6th Sem - SEC	Global Positioning System (GPS)	Principles and uses of GPS	4	4 class lectures
MARH	**2ND SEMESTER**	2nd Sem -MAJOR (Theory)	Theories of origin of towns & Functional classification of urban settlements	Theories of origin of towns after Childe and Mumford; Functional classification of urban	9	8 class lectures & 1 PPT based class

				settlements: A. Mitra		
		2nd Sem -MAJOR (Practical)	Map projection	Map projection: Definition, nature, properties, classification and uses; Mathematical / graphical construction of Polar Zenithal Gnomonic Projection	3	3 class lectures
		2nd Sem -SEC (Theory)	Global issues related to sustainable development & Global initiatives in sustainable development	Global issues related to sustainable development like soil erosion & Global initiatives in sustainable development like Ramsar convention	6	6 class lectures
		2nd Sem -SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Composition and structure of atmosphere; Insolation and heat budget; Temperature distribution, pressure belts	Composition and structure of atmosphere; Insolation and heat budget; Temperature distribution, pressure belts	6	6 class lectures
		2nd Sem-MINOR (Practical)	Map projection	Mathematical / graphical construction of Polar Zenithal Gnomonic Projection	3	3 class lectures
	4TH SEMESTER	4th Sem-DSC (Theory)	Spatial Information/Data	Data structures; data interpolation	6	6 class lectures
		4th Sem - DSC (Practical)	Statistical techniques	Measures of central tendency	3	3 class lectures with signature
		4th Sem - SEC	GIS Data Structures	Types (spatial and non-spatial), raster and vector data structure	4	4 class lectures
		4th Sem-GE (Theory)	Rice), tea, rubber and horticulture	Intensive farming (rice), plantation farming (tea and rubber), horticulture	6	6 class lectures
		4th Sem -GE (Practical)	Topographical maps	Interpretation of topographical map of India; Relief	3	3 class lectures
	6TH SEMESTER	6th Sem - DSE (Theory)	Climate change and vulnerability	Physical, social and economic vulnerability	6	6 class lectures
		6th Sem - DSE (Practical)	Project report	Secondary data collection	2	2 class lectures
		6th Sem - SEC	GIS Data Structures	Types (spatial and non-spatial), raster and vector data structure	4	4 class lectures

APRIL	**2ND SEMESTER**	2nd Sem -MAJOR (Theory)	Urban landuse and morphology	Urban landuse and morphology: Concentric zone theory, Sector theory and Multiple nuclei theory	9	9 class lectures
		2nd Sem -MAJOR (Practical)	Map projection	Polar Zenithal Stereographic Projection and Polar Zenithal Orthographic Projection	3	3 class lectures
		2nd Sem -SEC (Theory)	Global initiatives in sustainable development	Stockholm conference and Earth Summit (Rio 1992)	6	6 class lectures
		2nd Sem -SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Wind systems, precipitation Cyclones, Climate change	Wind systems and precipitation types; Cyclones and anti-cyclones; Climate change	6	6 class lectures
		2nd Sem-MINOR (Practical)	Map projection	Polar Zenithal Gnomonic Projection and Simple Conical Projection with one standard parallel	3	3 class lectures
	4TH SEMESTER	4th Sem-DSC (Theory)	Functions of Spatial information system	Information retrieval; Topological modelling	6	6 class lectures
		4th Sem - DSC (Practical)	Statistical techniques	Measures of central tendency	2	2 class lectures
		4th Sem - SEC	GIS Data Structures	GIS Data Analysis: Input; geo-referencing; editing and output	4	4 class lectures
		4th Sem-GE (Theory)	Industrial location, classification of industries	Factors of industrial location, types of industries, distribution of Iron & Steel industry	6	6 class lectures
		4th Sem -GE (Practical)	Topographical maps	Interpretation of topographical map of India; Drainage & Natural Vegetation,	2	2 class lectures
	6TH SEMESTER	6th Sem - DSE (Theory)	Impact of Climate Change	Agriculture and water; flora and fauna	6	6 class lectures
		6th Sem - DSE (Practical)	Project report	Secondary data collection	2	2 class lectures
		6th Sem - SEC	GIS Data Structures	GIS Data Analysis: Input; geo-referencing; editing and output	4	4 class lectures
MAY	**2ND SEMESTER**	2nd Sem -MAJOR (Theory)	Settlement hierarchies, Primate city and Rank size rule; Central place theory	Settlement hierarchies; Concept of Primate city and Rank size rule; Central place theory by W. Christaller	9	8 class lectures & 1 PPT based class
		2nd Sem -MAJOR		Mathematical / graphical		

		(Practical)	Map projection	construction of Cylindrical Equal Area Projection and Mercator Projection	3	3 class lectures with signature
		2nd Sem -SEC (Theory)	Millennium Development Goals	India's progress with respect to MDGs; Future trends and challenges of sustainable development	6	6 class lectures
		2nd Sem -SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Distribution of temperature and salinity; Ocean currents:	Distribution of temperature and salinity of ocean water; Ocean currents: Causes, types and their distribution over the Indian Ocean	6	6 class lectures
		2nd Sem-MINOR (Practical)	Map projection	Simple Conical Projection with one standard parallel and Cylindrical Equal Area Projection.	3	3 class lectures
	4TH SEMESTER	4th Sem-DSC (Theory)	Functions of Spatial information system	Networks; overlay; data output	6	6 class lectures
		4th Sem - DSC (Practical)	Statistical techniques	Measures of dispersion	2	2 class lectures
		4th Sem - SEC	Application of GIS	Land use mapping; urban sprawl analysis; forests monitoring	4	4 class lectures
		4th Sem-GE (Theory)	Cotton Textile industry & Growth and distribution of population	Distribution of Cotton Textile industry & Growth and distribution of population	6	6 class lectures
		4th Sem -GE (Practical)	Topographical maps	Interpretation of topographical map of India; Transport & Communication	2	2 class lectures
	6TH SEMESTER	6th Sem - DSE (Theory)	Climate Change & Adaptation and mitigation to climate change	Human health & Adaptation and mitigation to climate change	6	6 class lectures
		6th Sem - DSE (Practical)	Project report	Field visit and data analysis	2	2 class lectures
		6th Sem - SEC	Application of GIS	Land use mapping; urban sprawl analysis; forests monitoring	4	4 class lectures
JUNE	**2ND SEMESTER**	2nd Sem -MAJOR (Theory)	Central place theory	Central place theory by A. Losch and revision	9	9 class lectures
		2nd Sem -MAJOR (Practical)	Map projection	Map projection	3	3 class lectures
		2nd Sem -SEC	Millennium	India's progress with respect to MDGs; Future	6	6 class lectures

		(Theory)	Development Goals	trends and challenges of sustainable development		
		2nd Sem -SEC (Practical)	Project Report	Project Report	2	2 class lectures
		2nd Sem-MINOR (Theory)	Coral reefs and theories of reef formation	Coral reefs and theories of reef formation after Darwin and Daly; Sea level change	6	6 class lectures
		2nd Sem-MINOR (Practical)			3	Doubt clearing sessions
	4TH SEMESTER	4th Sem-DSC (Theory)	Application of SIT	Application of SIT in different fields	6	Preparation of final Exams
		4th Sem - DSC (Practical)			2	Preparation of final Exams
		4th Sem - SEC			4	Doubt clearing sessions
		4th Sem-GE (Theory)	Population	Characteristics of population	6	Doubt clearing sessions
		4th Sem -GE (Practical)	Topographical maps	Revision	2	Doubt clearing sessions
	6TH SEMESTER	6th Sem - DSE (Theory)	Climate change	Adaptation and mitigation to climate change	6	Doubt clearing session
		6th Sem - DSE (Practical)	Project report	After field survey & data interpretation	2	Final sheets signature
		6th Sem - SEC			2	Preparation of final Exams

Signature of the Teacher