

**Preview file of Teaching Plan Academic Session: 2025-26**  
**Department of Geography**  
**Jagannath Barooah College, Jorhat**

**Name of the Teacher: MADHUJYA MILI**  
**Semester: UG and PG-ODD & EVEN**

<b>UNDER GRADUATE</b>								
<b>Class/ Semester</b>	<b>Title &amp; Code of The Paper Allotted (Credit)</b>	<b>Method of Teaching</b>	<b>Teaching Material</b>	<b>Unit</b>	<b>Topic</b>	<b>Period/ Hours Required</b>	<b>Details of the Contents</b>	<b>Remarks / Books</b>
Sem I (Odd)	Introduction to the Planet Earth (GGRMJ-011) (Credit-4)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	II	Measurement of Local and Standard time	14	Prime meridian, international date line, Local and Standard time.	Fundamentals of Practical Geography, Dr. L.R. Singh
	Introduction to the Planet Earth (GGRMI-011) (Credit-4)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	II	Measurement of Local and Standard time	14	Prime meridian, international date line, Local and Standard time.	
	Skill Enhancement Course (Credit-3)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	III	Measurement on Map	14	Measurement of map distance, map reduction and enlargement, finding scale on map, point, line, polygon, statistical data representation	

Sem II (Even)	Human Geography (GGRMI022) (Credit-04)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	I	Introduction of Human Geography	14	Field of Human geography: Nature and Scope, Developmental trend; Branches of Geography; Relation to human geography with other social science.	Human Geography, Majid Hussain
	Map Study Skill Enhancement Course (Credit-3)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	II	Measurement on Map	14	Measurement of map distance, map reduction and enlargement, finding scale on map, point, line, polygon, statistical data representation	Fundamentals of Practical Geography, Dr. L.R. Singh
Sem III (Odd)	Physical Geography 1 (Geomorphology+ Oceanography (GGRMJ031) (Credit-4)	Lecture, PPT, Class Demos	Textbook, Diagrams, Models	I	Introduction to Geomorphology	10	Geomorphology: Meaning, Nature, Scope; Fundamental Concepts of Geomorphology	Geomorphology, Savindar Singh, P. Dayal, Madhujya Mili, B.N. Goswami and Uttam Mili  Fundamentals of Practical Geography, Dr. L.R. Singh
	Physical Geography 1 (Geomorphology+ Oceanography (GGRMI031) (Credit-4)	Lecture, PPT, Class Demos	Textbook, Diagrams, Models	I	Introduction to Geomorphology	10	Geomorphology: Meaning, Nature, Scope; Fundamental Concepts of Geomorphology.	
	Morphometric Analysis (Practical) (GGRMJ033) (Credit-4)	Lecture, PPT, Class Demos	Textbook, Diagrams, Models	I	Introduction to Morphometric Analysis	08	Meaning of Morphometry, Morphometric analysis, importance and applications.	
	Map Study Skill Enhancement Course (Credit-3)	Lecture, PPT, Discussion	Textbook, Diagrams, Models	II	Measurement on Map	14	Measurement of map distance, map reduction and enlargement, finding scale on map, point, line, polygon, statistical data representation	
Sem IV (Even)	Population Geography (GGRMJ 041) (Credit-4)	Lecture, PPT, Seminar	Textbook, Diagrams, Models	I	Population planning and Policies.	12	Economic composition of population with special reference to India.	Population Geography, R.C. Chandna
	Quantitative Techniques in Geography (GGRMJ 042) (Credit-4)	Lecture, PPT, Class demos	Textbook, Diagrams, Models	II	Introduction to measures of dispersion		Introduction to absolute measures of dispersion (range, quartile deviation, mean deviation and standard deviation) and relative measure of dispersion or co- efficient of variation; measurement of	Quantitative Techniques, Aslam Mahmod

Sem IV (Even)	Cartographic Techniques (Practical) (GGRMJ-044) (Credit-4)	Lecture, PPT, Class demos	Textbook, Diagrams, Models	I	Concept of Cartography and Scale	18	measures of dispersion using geospatial data; advantage and disadvantages of absolute and relative measures of dispersion.  Cratography: Concept of map and cartogram; Types of scale, construction of graphical scale( Linear, comparative and diagonal), conversion of scale from one from another; Application of scale in cartograms(Linear, areal and volumetric)	Fundamentals of Practical Geography, Dr. L.R. Singh
Sem V (Odd)	Physical Geography II- Climatology & Biogeography (GGRMJ 051) (Credit-4)	Lecture & Board work, PPT and Class Demos	Textbook, Diagrams, Models	I	Introduction to aerial photography & Introduction to GIS and GPS	14	Origin and structure of atmosphere; Heating and cooling of the atmosphere and global heat budget; elements of weather and climate	Climatology, DS Lal
	Geoinformatics (Theory) (GGRMJ 053) (Credit-4)	Lecture & Board work, PPT and Class Demos	Textbook, Diagrams, Models	I & V	Introduction to aerial photography & Introduction to GIS and GPS	12+12=24	Basic information and specifications of aerial photographs, Aerial cameras – types and their characteristics; definition and terms in photogrammetry, types of aerial photographs, Geometry of aerial photographs.  Definition, concept and history and developments in the field of information systems; Components of GIS and GPS; Raster and Vector data; GPS system elements and signals; GPS and its application in remote sensing.	Campbell, J.B.2002: Introduction to Remote Sensing
	Geoinformatics (Practical) (Credit-4)	Lecture & Board work, PPT and Class Demos	Textbook, Diagrams, Models	II	Raster data Handling	16	Importing raster data in QGIS, georeferencing, layer stacking of satellite imagery,, creating colour composite, creating subset.	Campbell, J.B.2002: Introduction to Remote Sensing

Sem VI (Even)	Evolution of geographical thought (GGRMJ-061) (Credit-4)	Lecture & Discussion	Textbook, Diagrams, Models	IV	Conceptual Development in Post War period.	12	Quantitative Revolution: Historical Perspectives, Objectives, Impacts, Merits & demerits; Application of System Analysis in Geographical studies; Regional concept in Geography	Dikshit R. D., 1997: Geographical Thought: A Contextual History of Ideas, Prentice.
	Geography of Assam (GGRMI-062) (Credit-4)	Lecture & Discussion	Textbook, Diagrams, Models	I	Resources and Industries	14	Minerals and energy resources: types, importance and their distributions; Industries: Petroleum, cement, polymer; development of small scale, emerging and household industries in Assam; problems of industrial development in Assam; Tourism: Potential zones, development of tourism, ecotourism and its impact on economy of Assam.	Taher, M, Ahmed, Assam: A Geographical Profile.
	Surveying (Theory) (GGRMJ-064) (Credit-4)	Lecture & Discussion	Textbook, Diagrams, Models	I	Plane Table Surveying	14	Introduction to plane table surveying and its accessories; types of plane table surveying-radiation. Intersection, resection and traversing method; measurement of area of a surveyed plot.	Fundamentals of Practical Geography, Dr. L.R. Singh
	Surveying (Practical) (GGRMJ-065) (Credit-4)	Lecture & Discussion	Textbook, Diagrams, Models	I	Plane Table Surveying	14	Radiation method; Intersection or reorientation method, Measurement of area surveyed.	
<b>POST GRADUATE</b>								
Sem I (Odd)	Geomorphology (Theory) (PGGRC-101) (Credit-4)	Lecture & Class Interaction	Textbook, Diagrams, Models	IV	Recent Geomorphic concepts	12	Concept of applied geomorphology; palaeogeomorphology and environmental geomorphology; quantitative techniques in geomorphology; application of geoinformatics in geomorphology.	Geomorphology, Savindar Singh
	Morphometric study and Thematic Mapping (Practical) (PGGRC-103) (Credit-4)	Lecture & Class Interaction	Textbook, Diagrams, Models	III	Thematic Mapping	12	Preparation thematic maps using point, line, area symbols; Preparation of Chorochromatic map (at least two works)	Fundamentals of Practical Geography, Dr. L.R. Singh

Sem II (Even)	Climatology, Biogeography and Oceanography (Theory) (PGGRC-201) (Credit-4)	Lecture, Board, Assignments	Textbook, Diagrams, Models	IV	Soil and the pedogenic Process	12	Classification of soil, concept of soil horizon; causes and effects of soil erosion and the need of soil conservation; soil forming processes.	Biogeography, N.N. Bhattacharjee.
	Land Survey and Field Survey Techniques (Practical) (PGGRD-203(Core) (Credit-4)	Lecture, Board, Assignments	Textbook, Diagrams, Models	I	Measurement of area using plane table	12	Plane table survey, measurement of an area.	Fundamentals of Practical Geography, Dr. L.R. Singh
	Regional Geography of the world (Theory) (PGGRG-201(GE) (Credit-4)	Lecture, Board, Assignments	Textbook, Diagrams, Models	V	Regional Geography of Australia and Antarctica	12	Physiography, Vegetation, Climate, Population distribution and economy	World Regional Geography, D.S. Manku.
Sem III (Odd)	Geoinformatics (Theory) (PGGRD-301 A (DSE) Credit-4	Lecture, Board, Assignments	Textbook, Diagrams, Models	II & V	Aerial Photography and Photogrammetry & Spatial data Studies.	12+12=24	Definition, types, uses of aerial photographs; Photogrammetry and it's all associated elements. Elements of spatial data, data sources, integration of RS, GIS and GPS; DEM & TIN	Geoinformatics, Basudev Bhatta
	Fundamentals of Remote Sensing (Practical) (PGGRC-303 Credit-4	Lecture, Board, Assignments	Textbook, Diagrams, Models	III, IV & V	Studies on Geospatial database, GPS data analysis and Viva-Voce, PNB design.		Data entry and map composition, Processing of GPS data in software, Practical note book design and presentation in GIS.	
Sem IV (Even)	Population Geography (Theory) (PGGRC-401) Credit-4	Lecture & Discussion	Textbook, Diagrams, Models	I	Introduction to population geography	12	Significance and its relation to other sciences; methodological developments, population data and sources with special reference to census of India	Population Geography, RC Chandna
	Geoinformatics (Theory) (PGGRD-401 A (DSE) Credit-4	Lecture & Discussion	Textbook, Diagrams, Models	II & III	Spatial data models; Geospatial analysis.	12+12=24	Raster data models: RLE & BE; Vector data models: Spaghetti and topological models; geospatial analysis: Concept, database query, overlay operations and surface analysis; revisualization in GIS	Geoinformatics, Basudev Bhatta
	Dissertation/ Project report (PGGRC-403) Credit-4	Lecture, Discussion & field visit	Textbook, Diagrams, Models	All	Topic will be selected by the students individually		-----	

**N:B: Excluding Tutorials.**