

Department of geography
LessonPlan-2023-24

Semester One- Major & Minor

Semester	Paper	Unit	Topic	Teaching Hours	Name of Faculty
1 st semester	GEOG -H-CC 01/MD -CC 01-1/3- Th-Ph ysical Geogr aphy	I	1. Concept and applications of scales . Components and classification of maps 7.Factors of soil formation	5+4	Tumpa Hudut
1 st Semester		II,IV	2. Seismic waves and internal structure of the earth 5. Nature,composition,and layering of the atmosphere 6. Circulation in the atmosphere:Planetarywinds, jetstreams,and indexcycle	4+5+3	DR. Asrafal Alam
1 st Semester		III	3. Classification of weathering and agents of erosion 4. Fluvial processes and landforms	5+5	Priyanka Dey
1 st Semester		I,V	1. Projection , 8. Evolution of an ideal soil profile	4+4	Taniya Kar

1 st Semester		VI,VII	9. Plant adaptation and distribution in relation to water availability 10. Nature and classification of hazards and disasters in Indian context	5+5	Moumita kundu
1 st Semester	practical	1	Graphical construction of scales: Plain, comparative	5	Priyanka dey
		1	Graphical construction of scales : diagonal, and vernier	5	Tumpa Hudut
		2	Delineation of drainage basins on Survey of India 1:50k topographical maps. Determining stream ordering (Strahler), and bifurcation ratio in a drainage basin (c. 5' x 5')	10	Taniya Kar
		3	Identification Of Drainage And channel patterns from Survey of India 1:50k topographical maps	6	Moumita kundu
		4	Construction And Interpretation Of Windrose Diagram	4	Dr. Asrafal alam

SemesterOne

GEOG-H-SEC01/MD-SEC01-1/2/3-Th-Methods in Geography –100

Marks/4Credits

Semester	Paper	Unit	TOPIC	Teaching Hours	Name of Faculty
1 st semester		I,II	1.Designing of primary survey based on diverse research problems. Relevance of pilot survey 3.Preparation of questionnaire and interview schedule 8.Textural Analysis of grains using sieves.	4+4	Tumpa Hudut
		I	2.Sampling types and strategy based on diverse research problems 4.Data compilation into master table 6.distometer, smart phone levelling applications	4+4+3	Priyanka dey
		I,II	5. Computer-assisted field data entry; tabulation data into frequency distribution tables 9 Mapping and extraction of flooded areas from satellite images and digital elevation models 10. Mapping areal and linear extent of river bank and coast line shift from Survey of India 1:50k maps and/or satellite images	4+5+5	Dr. Asraful Alam

		I,II,III	6.Statistical analysis of data: measures of central tendency and dispersion 7. Use of minor survey instruments: Brunton compass. 14. Preparation of flowcharts using transportation data	4+1+5	Moumita Kundu
		III	11. Dominant and distinctive functions 12 Ternary diagram showing occupational patterns (after Ashok Mitra) 13. Preparation of accessibility map	4+4+5	Taniya Kar

GEO-H-IDC01-1/2/3-Th-Geomatics and Spatial Analysis-50 Marks/2

Credits

Semester	Paper	Unit	TOPIC	Teacher	Name of Faculty

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1 st semeste r		I,II,II I	1. Concept and applications of scales and projections. Components And Classification Of maps 5. sensors with reference to IRS and Landsat missions 4. Dumpy level	4+2+2	Tumpa hudut
		I	2. Bearing: Magnetic and true, whole-circle and reduced. Concept of geoid and spheroid with special reference to WGS-84	3	Moumita kundu
		I	3. Map projections: Classification, properties and uses with special reference simple conical projection and Universal Transverse Mercator (UTM) 7. GIS data types: Spatial And Non-spatial (attribute table and metadata), raster and vector	5+2	Priyanka dey
		II	4. Theodolite	2	Taniya kar
		II	4. Basic Concepts Of Surveying, survey equipment, and their capabilities: total station, and Global Navigation Satellite System (GNSS) 5. Principles of remote sensing (RS). Types of RS satellites 8. Principles Of Preparing Attributes Tables, data manipulation, query, and overlay 6. Principles of preparing standard false colour composites (FCCs) and supervised image classification	6+3+7+4	Dr. Asraful Alam

GEO-H-IDC01-1/2/3-P-Geomatics and Spatial Analysis Lab

Semester	Paper	Unit	TOPIC	Teaching Hours	Name of Faculty
		1	Construction of simple conical projection with one standard parallel	6	Priyanka Dey
		2,3,	Traverse survey and plotting UTM coordinates using smartphone GNSS application	8+8+8	Dr.

		4	Identification Of Landuse/landcover features from standard FCCsand preparation of inventories Changedetectionofriverbankorcoastlineshiftfrommulti-dated mapsandimages		Asrafu I Alam