

5. Murthy, K. S. 1988. *National Environmental Policy Act (NEPA) Process*. CRC Press, Boca Raton USA, 1-18.
6. Ortolano, L. 1993. *Control on Project Proponents and EIA Effectiveness. The Environmental Professional*, Vol. 15:350-363.
7. Thornbury, W. D., 2004, *Principles of Geomorphology*, CBS Publ., 5-570.
8. Wathern, P. 1988. *EIA: Theory & Practice*. Unwin Hyman, London, 1-17.
9. Wood, C. 1995. *EIA: A Comparative Review*. Longman. 87-255.

GIP 455: GEOMORPHOLOGY AND GEOSTATISTICS (Lab S)	
Geomorphology	
1.	Morphometry of drainage basins . Analysis of drainage patterns and orientation structure.
2.	Preparation of DEM from topographical maps, ASTER and SRTM data.
3.	Preparation of Aspect, Shaded relief, and Slope maps from DEM .
4.	Interpretation of longitudinal and cross-valley profiles .
5.	Generation of geomorphologic maps showing fluvial, coastal/marine, denudational, volcanic and glacial land forms .
6.	Exercises related to measurements of runoff dynamics and sediment dynamics.
Geostatistics	
1.	Quartiles, Deciles and Percentages
2.	Measures of Dispersion
3.	Skewness and Kurtosis
4.	Students T test
5.	Regression and Multiple linear regression
6.	SPSS: Introduction to SPSS. Use of SPSS in creating a database. Applications of SPSS in Correlation Co-efficient. Use of SPSS in Linear Regression. Modeling and Prediction. Application of SPSS in GIS data modeling.

GIP 456: GIS AND DBMS (Lab S):	
GIS	
1.	Geo-referencing – image rectification based on co-ordinate system. Onscreen digitization
2.	GIS and Remote Sensing data integration: Integration of vector and raster data (linking of spatial and non-spatial data)
3.	Extraction of Thematic maps: preparation of thematic layers-on screen from toposheets, images - Road, Settlement, Drainage, LU/LC etc.
4.	Map composition and presentation of results. Overlay and proximity analysis-clip, erase, intersect, union, buffer.
5.	Edge matching/spatial adjustment. Calculation of slope in degrees and percentages. Calculation of area, perimeter and distance using Arc GIS.
6.	Creation of 3D maps: TIN, Hill shade, Slope, and Aspect with Arc GIS.