**Geo-visualization Concepts**

* Introduction: Geovisualization
* History: Geovisualization

**2D Visualization of Change**

* Geovisualization of temporal data
* Dynamic visualization variables
* One case study
* Mobile GIS & Cartography

**3D Visualization**

* Vegetation and Landscape Scenery
* One example
* Visualize construction planning in 3D
* Visualize an ocean canyon in 2D and 3D
* Exercises :

**Visual Analytics and Exploratory Data Analysis**

* Geospatial Visual Analytics
* Exercises :

**Geo-visualization Do’s and Don’ts**

* Ethical Issues of Visualization
* Landscape Visualization and Climate Change

**Reflection**

* Reflection: Geovisualization

Practical part step by step

1. Import the data
2. Import different data type
3. Create shapefiles
4. Connect with coordinate system
5. Symbolize the data
6. Create different type maps (Map for Water networks, geological faults, Road networks, Vegetal coverage, Lithology, Slope, Precipitation
7. DEM
8. CLIP
9. Symbolize
10. Add the base map (for example OpenStreetMap)
11. Georeferenced
12. Using basic mapping platforms
13. Google Earth, Google Maps engine
14. Visualize data
15. Classification and reclassification of the data

* Classification
  + Generalization
  + Ranking
  + Selection
* Reclassification
* Land use and land cover maps
* Water body buffer analyses
* Slope map
* 3D visualization

1. Analyze the data
2. Symbolize it, and actually produce cartographic image,
3. Working in ArcGIS with attribute tables
4. Layout (map design)