

# Spatial Modeling and Analysis

## Assignment One

### Research Base

Spatial Analysis is a process of extracting meaning from spatial data. This may involve interpolating continuous data layers from a sparse sample set, statistical analysis of attributes, or processing to remove unwanted information. A type of spatial analysis (raster) is Interpolation Technique where unknown values for any geographic point data: elevation, rainfall, chemical concentrations, noise levels, and so on are predicted. Some of the techniques are

- Triangulated Irregular Network
- Thiessen polygon
- Spline
- Kriging

Your task is to research and:

1. **Define** each of the techniques above (8marks)
2. **In your own words/explanation, highlight the difference** amongst each of the techniques above and (8marks)
3. **Give examples** of their applications explaining where, how and with what data types each of the above techniques can be applied (12marks)
4. Research (2marks)
- 5.

Total Marks: 30