GIS Basics

This course will provide a blend of hands-on lab experience using GIS software, backed with a lecture series to provide the underpinning concepts.

Day 1 | May 22
Course overview, introduction to GIS
Basic ArcGIS navigation, online help
Cartographic principles and conventions
ArcGIS basics, loading data, scales, navigation, online help

Day 2 | May 23
Spatial data properties and structure
Joining spatial and tabular records, projection definition and conversion
Spatial data management, geodatabase basics
Attribute query, joining and relating, projection

Day 3 | May 24
Vector based spatial analysis
Georeferencing
Raster based spatial analysis
Location query, overlay and adjacency analyses
Map algebra, surface analysis, raster-vector conversion

Day 4 | May 25
Data collection and data quality
Network routing Network analysis
Introduction to crime mapping challenge

Day 5 | May 26
Crime mapping challenge
Crime mapping challenge
Presentations

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