

## Day 04 - Activities: Data Formats and Open-Source GIS

### Lecture (in class):

- Lecture 4: [Data Formats and Open-Source GIS](#) (PDF)
- Demonstration: [GIS Files](#)
  - Shapefiles: [Mapshaper](#)
  - GeoJSON: [Geojson.io](#)

### Lab (in class):

- [QGIS Tutorials](#) (Chinese Tutorials: [here](#))
  - Tutorial 4a: [Working with Attributes](#)
  - Tutorial 4b: [Importing Spreadsheets or CSV](#)
  - Tutorial 4c: [Performing Table Joins](#)
- R Tutorial

### Reading:

- Article: [27 Differences Between QGIS and ArcGIS](#)
- QGIS Examples: [Map Examples](#)
- GIS - An Introduction (McHaffie and Hwang, 2019)
  - [Chapter 8](#): Open Source GIS (pp 217-238)

### Research:

- [Leaflet](#): open-source JavaScript library for mobile-friendly interactive maps
- D3 Mapping:
  - [D3 Wiki](#): Assortment of D3 examples
  - [D3 Geographic](#): D3's approach to rendering geographic information