University of California, San Diego Extension Guangzhou University Summer 2019 GIS Program

Day 06 - Activities: Spatial Analysis

Lecture (in class):

- Lecture 6: Spatial Analysis (PDF)
- Demonstration:
 - Wind Farm Site Analysis
 - o Video: Clip, Erase, Intersect, and Union in ArcPro

Lab (in class):

- ArcGIS Pro Tutorials
 - Tutorial 6a: Geoprocessing Toolbox: Invasive Weeds
 - o Tutorial 6b: Are there any places in the city to build a mixed-use development?
 - Tutorial 6c: Are liquor stores too close to schools, libraries, and parks?

Reading (Homework):

- ArcGIS Book Chapter 05: The Power of Where
 - o English version
 - o Chinese version
- The Language of Spatial Analysis (pp. 21-32)
- ArcGIS Pro Documentation:
 - o Buffer analysis
 - Overlay analysis (ArcMap)
 - An overview of the Overlay toolset
- GIS An Introduction (McHaffie and Hwang, 2019)
 - Chapter 4 Geospatial Analysis (pp 77-84)
- Essentials of GIS (Campbell, 2011)
 - Chapter 7 Geospatial Analysis I: Vector Operations (pp 167-184)

Homework:

- Complete Tutorial 6b **or** 6c (above) using one of the following softwares:
 - ArcMap or ArcGIS Online or QGIS
- Story Maps Begin: <u>Create a Story Map Cascade</u> (San Diego):
 - Start the Cascade Builder,
 - Configure the cover for your Cascade
 - Add some introductory text and photos
 - Add a map
- Read: Getting to Know the New Story Maps