Resources for Teaching with GIS

Wisconsin Technical College System (WTCS) BOSS Conference.

November 1st 2018. Elkhart Lake, Wisconsin.

1. Software

- ArcGIS Online (Free and paid tiers): https://www.arcgis.com/home/signin.html
- ArcGIS Desktop (Paid, with cheaper non-commercial pricing): http://www.arcgis.com/index.html
- Google Earth Pro (Desktop edition free): https://www.google.com/earth/desktop/
- QGIS (Desktop GIS free): https://ggis.org/en/site/

2. Applications of GIS (Business and other sectors)

- The Geospatial Revolution: http://geospatialrevolution.psu.edu/ (**Highly recommended)
- GIS (ArcGIS) use by industry: https://www.esri.com/en-us/industries/index (**Highly recommended)

3. Story Maps (Tutorials, Templates, Examples)

ArcGIS Story Maps: https://storymaps.arcgis.com/en/

4. Essential Starter Lessons

- Get Started with Map Viewer: https://learn.arcgis.com/en/projects/get-started-with-map-viewer/
- Get Started with Story Maps: https://learn.arcgis.com/en/projects/get-started-with-story-maps/
- Getting Started with ArcMap (Desktop GIS): https://learn.arcgis.com/en/projects/get-started-with-arcmap/
- QGIS Tutorials and Tips (QGIS): https://www.qgistutorials.com/en/

5. Today's Demonstration (Data and Instruction Sheet)

Data and instruction sheet: https://bit.ly/2Rgib0K

6. Classroom activities

- ESRI Tapestry Segmentation: https://www.esri.com/en-us/arcgis/products/tapestry-segmentation/zip-lookup (**Highly Recommended)
- ESRI Retail Analysis Map: https://www.esri.com/en-us/industries/retail/market-analysis-map
- Teach with GIS: https://learn.arcgis.com/en/educators/ (scroll to the bottom of the page)
- ESRI Geoinquiries: https://bit.ly/2R9BcEJ (created for K-12, but many exercises can be modified and adapted for the college classroom)
- MIT Opencourseware GIS Tutorial: https://bit.ly/2z0uHws

7. Free Online Classes

- The Location Advantage (MOOC): https://bit.ly/2JQIJ9Q (**Highly Recommended)
- Teaching with GIS: Introduction to Using GIS in the Classroom: https://bit.ly/2vLgIAS

8. Free Online Books/Tutorials

- The ArcGIS Book: https://learn.arcgis.com/en/arcgis-book/
- The ArcGIS Imagery Book: https://learn.arcgis.com/en/arcgis-imagery-book/
- A Gentle Introduction to GIS (QGIS): https://docs.qgis.org/2.8/en/docs/gentle-gis-introduction/