ArcGIS 10.1

ArcGIS 10.1 is a geographic information system (GIS) used to build, edit, visualize, and analyze temporal and spatial data. ArcGIS is a powerful tool used by a wide variety of professionals and research communities. Examples of use include implementation of more effective police enforcement by tracking where crimes occur, and enabling public officials to track the spread of infections across geographic areas. The Scholarly Commons provides access to ArcGIS 10 on all computers in Room 306 and Room 314. ArcGIS 10.1 contains ArcMap, ArcCatalog, ArcGlobe, and ArcScene. This guide focuses on ArcMap. ArcMap allows you to create maps and associate data with them.

Start a Project

To start a new project, open ArcMap and select “Blank Map.” The Table Of Contents is located on the left and is used to view and reorganize the layers of your map. The Catalog is located to the right and is used to ingest data to ArcMap.

Click on the icon that is a folder with a plus sign on it, this icon is called Connect To Folder. Locate the directory that you want to connect to. Go under the Folder Connections tab and right-click the folder with that contains the data that you are working with. From here you can open a raster image, perhaps of a map of the United States for instance, and then add data points. These two distinct “layers” can be displayed one on top of the other. Layers can be turned on and off, as well as moved to the Table of Contents column on the left.
You can also change the color associated with them by right clicking the layer in the Table of Contents and selecting Properties.

Click the Location dropdown in the Catalog to connect to the directory where your data is stored. For example, if you have a folder on your desktop named “Data,” you would connect to the folder “C:\Users\yourusername\Desktop\Data.”

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Resources in the Scholarly Commons

http://vufind.carli.illinois.edu/vf-uiu/Record/uiu_6442764

GIS Tutorial 1 demonstrates GIS functionality, from creating maps and collecting data to using geoprocessing tools and models.

http://vufind.carli.illinois.edu/vf-uiu/Record/uiu_6442767

GIS Tutorial 2 demonstrates GIS spatial analysis methods, such as location analysis, geographic distribution, pattern analysis, and cluster identification.

http://vufind.carli.illinois.edu/vf-uiu/Record/uiu_6442765

GIS Tutorial 3 demonstrates geodatabase framework design, data creation and management, workflow optimization, labeling, and symbolizing.

Other Resources
ArcGIS Desktop official help guides:

Data sets:
http://www.library.illinois.edu/sc/datagis/spatialdata/index.html
Esri organized data sets:
www.esri.com/data/free-data