ArcMap Quick Start

Start ArcMap and make folder connections

ArcGIS includes several programs. ArcCatalog allows you to arrange your data more, but you should be able to do everything you need to do with ArcMap

In ArcMap create a blank map. Click on Customize—Toolbars and make sure that *Standard* and *Tools* are checked.

Then look at the right hand part of your screen, where you will see a tab for Catalog. Open that tab. That is where you will accumulate the data you will use. You do that with a folder connection, using a folder+ symbol at the top of the catalog box. Click on that and navigate to where your data is located and click ok. Then right click on the folder connection item in the list and click refresh. Now see if you can open your folder and see your data. You may see subfolders and files with different extensions: .gdb, .shp …

You can also add online basemaps: Click on **File – Add Data – Add Basemap**: then choose one and **Add**. For our purposes, ignore any warning about the geographic coordinate system.

Adding data layers

Your map will show the data layers you drag and drop from the catalog window to the left hand column of the screen (called the table of contents) or add using **File—Add Data**. Those are shown as layers, with the top layer listed on top. The check boxes allow you to turn layers on and off. To change colors and symbols and label features, left click on the colored box below the listing of the layer and/or right click on the layer to experiment with different options.

If the top layer is opaque you will need to make it more transparent before you can see the layers below it. With the layer selected (highlighted in the left hand table of contents) go to the *Display* tab. Set the *Transparent* entry to 70% and press *OK* to see what happens

If you bring in a photograph or scan that isn't georeferenced, ArcGIS will not know where to put it, you will need to georeference it (separate instructions). Make sure you zoom and pan to where your photograph will fit before you try to open it.

When you have your data layers in place choose **File – Save.** This action creates a *map file* (.mxd). A map file is a very small file that contains pointers to your data sets and remembers what you had up in your session. If you quit ArcMap at this point, the next time you start it, you can choose to start with this existing mapfile and it will automatically pop up all the data layers you added in your first session and with the view of the data just as you left it. Thus, map files are easy ways to save work. But beware - map files do not actually contain the data layers, they only have pointers to the data layers.

Getting around a map

Use the *zoom in, zoom out* (magnifying glass with plus and minus), and *pan* (hand) tools to move around the map. Click on the tool you want, then click on the map. Create a bookmark when you get to the view you want so that you can easily return to it.

If you are using a base map much larger than you need, zoom and pan to the area you need and select **View—Data Frame Properties—Data Frame—Other—Specify extent** and you can clip to the current visible area.

Other tools

Many of the tools are hidden. Click on customize and then toolbars and you will see many toolbars available. For Georeferencing, you will select the georeferencing toolbar. Toolbars can be dragged around by clicking on the dots on their left hand side.

Creating a map for printing or exporting

Layout View is much like viewing the page layout when you are working in a word processing software. You should do all the preliminary work and analysis in the *data frame view.* You can then switch to layout view either at the bottom of the map or from the view menu.

It is very important to understand the difference between the **Layout** toolbar and the regular (data frame) **Tools** toolbar. They share similar tools (zoom in and out, pan) but the **layout tools** work on the layout as if you were zooming in and out of the *paper itself*, while the same tools on the **Tools** toolbar work on the data inside the data frame. For easy sharing, you may also want to export your map as a pdf file.