SECTION 1: INTRODUCTION TO ArcGIS® 10

A main component of ArcGIS® 10 software is ArcMap. It can be used to create and edit maps and analyze spatial data.

1.1 Getting Started

Start ArcMap. If you do not have an ArcMap icon on your desktop or in your Windows “Start” menu, you can locate ArcMap from the Start Menu:

1) Click on the “Start” menu symbol in the lower left corner of your screen.
2) Choose “Programs” or “All Programs”.
3) Choose “ArcGIS”.
4) Choose “ArcMap”.

![Start Menu Screenshot](image.png)
In the dialog box that appears, choose to make a new blank map and then click “OK”:

Adding data

There are a couple of ways to add data. You can click on the “Add Data” button ( ), navigate to where your file is stored, click on the file you want to use, and then click “Add”.
Or you can use the Catalog. Click on the Catalog tab at the right side of the screen to open it. (If you do not see the Catalog tab, click on the menu option “Windows” and then click on “Catalog.”)

First, you will have to set up the catalog to include your data files. In the Catalog window right-click on Folder Connections..., then click on “Connect Folder...” Navigate to where your data files are stored and then click “Ok.”

Note: use the menu pin in the upper right corner of the Catalog window to set your Catalog to retract or to pin it open. A pin facing left lets the Catalog automatically retract; it will reopen when you hover your mouse over the Catalog tab. A pin facing down keeps the Catalog open.

Once your Folder Connections are set up, you can drag and drop files from the Catalog into your data frame. Adding the “US_STATES” file adds a data layer representing the United States with state boundaries.
Before we go further, notice a few things on your screen:

1) When working with map layers, the part of the screen in which the layers are drawn is called the **data frame**.

2) The column to the left of the data frame, which shows a list of your data layers, is called the **Table of Contents**.

3) The Table of Contents can list the map layers in your project in different ways. You can switch modes by clicking on the buttons at the top of the Table of Contents. We will be using the “List by Drawing Order” mode.

4) Next to each layer name there is a small check box. If you click it, the layer will turn on or off. You can use this to display (or not display) an individual layer.

5) To the left of that check box, there is a smaller box showing a + or - character. This controls the display of the color coding or “symbology”. (Working with symbology will be covered in Lesson 1.3: Editing the Legend.) If the - character is displayed, the color coding (“symbology”) is already shown—in this case pink with a black border. If you want to compact your Table of Contents, you can turn this off by clicking on the -, which will hide the symbology. Click on the + to display the symbology again.
Adding more data

Drag and drop more files from the Catalog to add more layers to your map. Here we've added two more layers: “US_CITIES” and “US_COUNTIES”:

Changing the “stack” order

Notice that the software “stacks” the data layers in the map in the same order in which they are listed in the Table of Contents. Sometimes one layer will completely cover another. For example, in the map above, the US counties are covering the US cities.

Simply click on the layer name in the Table of Contents, hold the mouse button down, and slide it up or down. The map is redrawn with the new stacking order. Now we can see cities on top of the counties:
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