Please read the course syllabus found below before registering for the Introduction to ArcGIS workshop to ensure that the workshop's intended content match your needs. As this is an introductory course no prior experience with GIS concepts or ArcGIS software is required, although we do expect that you are comfortable working in a Windows environment.

While the workbook and workshop cover the following topics, progress through the workbook during the workshop can vary depending on the needs of the participants. Please know that in addition to receiving a workbook with step-by-step instructions for each of the exercises you will also receive a CD with the data utilized in the workshop, enabling you to work through the exercises on your own after the workshop.

Note: The CMAP staff members who teach this workshop are not certified ESRI trainers, but do have extensive backgrounds in GIS and a genuine interest in the success of the students.

Two-Day ArcGIS Basic Workshop Syllabus

Introduction
- Examples of the importance of thinking spatially
- Overview of ArcGIS including the three levels of functionality (ArcGIS for Desktop Basic, Standard, and Advanced formerly) and the three major graphic user interfaces (ArcMap, ArcCatalog, ArcToolbox)
- Explanation of shapefiles, map documents, and layers
- The importance of preparing your project conceptually and of writing process notes during a project

Part One:
- Basic material about map projections and coordinate systems
- Key functions of ArcCatalog
- Hands on experience with ArcMap including the Table of Contents, displaying layers, and commands on the Main Menu, Standard Toolbar, Tools Toolbar, and Draw Toolbar
- How to add commands to a toolbar
- Many of the functions in Layer properties, Data Frame properties, and Map properties
- How to label features, symbolize features, make a layer transparent, and create a bookmark
- How to select features by mouse, by attribute and by location. How to create a shapefile from selected features

Part Two:
Topic One
- Join a table to the attribute table of a shapefile
- Create a definition query
- Create a polygon which is a buffer of a selected point
- Select by location using a buffer
- Learn the different interactive selection methods
- Learn how to view statistics in an attribute table

Topic Two
- Create an Address Locator and Geocode a table of addresses
- Learn how to interactively match unmatched addresses in a table
- Perform spatial joins

- Summarize on an attribute field
- Symbolize by quantities, graduated symbols, and graduated color
- Use hyperlinks to picture files and to websites
- Make table fields invisible, create a new field in a table, and calculate values in a field

Topic Three
- Create a new shapefile in ArcCatalog
- Create a feature in that new shapefile by performing heads up digitizing using an aerial photo
- Calculate the area and perimeter of a new shapefile in the attribute table
- Edit the geometry of a feature in a new shapefile

Part Three:
- Use many of the functions you have learned in the previous material to analyze a problem
- Learn the analytical functions of Buffer, Clip, Intersect, and Union found in ArcToolbox
- Learn how to summarize data

Part Four:
- Create a map layout using Layout View of ArcMap
- Learn about the Layout Toolbar and how the tools found on it differ from those on the Tools Toolbar
- Insert a title, legend, north arrow, scale, text and logo onto your map layout
- Learn how to align elements and group/ungroup graphics in a layout
- Learn how to export your map layout

Extra Exercises Available in the Workbook:
- Create stacked labels, create annotations, set reference scales, and mask labels
- Select features using relate
- Change the coordinate system or datum of a feature class
- Create a model