COURSE DESCRIPTIONS AND PRE-REQUISITES
(Hands-On Computer Lab Training)

What to Know About ArcGIS 10

Pre-requisites: Students who sign up for this course should have a basic understanding of ArcGIS 9.x operations.

Course Outline: This full-day, hands on course will take a look at what's new and what has changed recently in ArcGIS Desktop. The course is designed to show existing ArcGIS users basic program changes, new tools, tools that have changed, and editing and workflow changes. The class format will include presentation lectures, demonstrations and hands on exercises utilizing ArcGIS.

Understanding Coordinate Systems and Best GPS Practices

Pre-requisites: Current user of GPS data collection technology and GIS ArcMap 9.3 or 10 preferred.

Course Outline: This full-day, hands on course will review the basics of coordinate systems, projections, and datums in order that the attendee be able to align GPS and GIS data and ensure data integrity of a GIS system, and discuss best practices of GPS data collection to improve GPS yields and accuracies during data collection.

The class objectives are to teach the student;

- To select the correct coordinate system and projection.
- To understand and identify “datum shift” error and select appropriate datum in field and office software.
- To identify or check the coordinate system of data.
- To make the data match in a GIS.
- To create a customized coordinate system for use with TerraSync Field software
- To understand how datums and coordinate systems are handled in TerraSync Professional Field software, Pathfinder Office, ESRI ArcPad, and ESRI ArcGIS 9.3/10
- To select the correct datum and coordinate system during the post-processing and export of GPS data from Pathfinder Office and GPSAnalyst Extension.
- To understand the difference between “projections on the fly” and transformations in ArcGIS.
- To manually download GPS base station files from the National Geodetic CORS site.
- To learn the “Best Practices” for GPS data collection, including proper field software settings and GPS device handling.
- Will include hands on field exercises with GPS devices and lab time processing data on a desktop PC.

  * GPS devices will be made available if the attendee however has their own GPS device with TerraSync or ArcPad they are encouraged to bring it to the class.

COURSE DESCRIPTIONS AND PRE-REQUISITES
(Seminar Training)

Internet Mapping Overview – What you need to know to get started

Pre-requisites: None.

Course Outline: This one day seminar will help you understand all the major trends in today's Internet Mapping landscape. The technology that drives Internet Mapping has changed drastically in the last 10 years. Keeping up with the latest trends and developments can become a full time task in its own right. This seminar will give you an insight into what you need assemble together – from software to hardware and even skill sets – so your organization can most effectively communicate your geographic information via the Internet. The course is designed for anyone seeking to move their organization's geographic information to the Internet. It will focus upon general basic principles and give clear examples of good and bad practices so you can bypass the major potholes along the way. No advanced technological skills are needed to get the full benefit from this course.

Census Data Boot Camp

Pre-requisites: None.

Course Outline: The Census Data Boot Camp is designed to provide an overview of the Census Bureau's geographic operations and data products. We will review the results of the 2010 Decennial Census and what the Census Bureau is already planning for 2020 to build local partnerships and enhance our data products. Participants will learn how the Census Bureau is planning to improve address coverage, continued spatial feature updates, and enhanced quality assessment.

This is an opportunity to learn about various census operations and programs, including the American Community Survey (ACS), Boundary and Annexation Survey (BAS), Population Estimate Program (PEP), Local Update of Census Addresses (LUCA), Redistricting Data Program, New Construction, and Special Census. We will look at the importance of local participation in these surveys and programs and how they impact funding and representation.

The course will also describe how to access the Census Bureau's geographic products and data, including TIGER/Line shapefiles and the new American Factfinder (AFF). Participants will learn where to go for data and what new products and data releases are on the horizon. Participants will also be introduced to the geographic areas for which the Census Bureau collects and tabulates data and we will provide a description of the basic Census Bureau census geographic hierarchy.