ArcGIS Training Outline

REGIS offers several ArcGIS 9 training options, including two day-long courses structured to introduce users to the application as well as increasing existing users' knowledge.

The following outline specifies both the basic structure of the REGIS ArcGIS Training Manual and the topics covered in the REGIS Training courses. Due to both time constraints as well as users' needs, certain subjects have been reserved for more advance courses or for one-on-one instruction on an as-needed basis.

REGIS Participant users can now choose which class or classes best fit their needs and schedules. The first class, REGIS ArcGIS Training I, covers all introductory concepts and gives users a good, working knowledge of the applications, available data and how to make basic maps. REGIS ArcGIS Training II presents more advanced concepts and takes the user a bit further into the system and data. Users who have a good, basic working knowledge of REGIS ArcGIS 9 may choose to only attend the second course to expand their abilities, while those desiring exposure to all of the concepts presented can choose to attend both classes.

More information, including schedules and calendars, can be found on the REGIS website at http://www.gvmc-regis.org/training.html.

REGIS ArcGIS Training I

1) INTRODUCTION & GIS CONCEPTS
- a) Welcome
- b) Logistics
- c) About REGIS
- d) What is a GIS?
- e) Map Scale
- f) Components of Geographic Data
- g) Overview of REGIS GIS Applications
- h) Getting "Online" Help

2) LOGGING IN & NAVIGATION
- a) Accessing the REGIS Environment
- b) Launch the ArcView 9.3 Application
- c) The ArcMap Interface
- d) Data View or Layout View
- e) Layers, Data Frames and Maps
- f) Layers
- g) Adding Data Layers
- h) Data Frames
- i) Maps
- j) Managing the Table of Contents
- k) Moving Around the Map
- l) Using a Bookmark
- m) Scale-dependent Display
- n) Magnifier and Viewer Windows
- o) Layer Symbology in ArcMap
- p) Labeling Features

3) QUERYING DATA
- a) Identifying
- b) Finding
- c) Geocoding
  - i. Single Address
  - ii. Parcel Number
  - iii. Multiple Addresses
- d) Measuring
- e) Map Tips
- f) REGIS Mailing Labels
- g) Calculating Acreage

4) MAPS AND LAYOUTS
- a) Creating Maps in ArcMap
- b) Setting Up the Page
- c) Identifying Map Elements
- d) Inserting Map Elements
- e) Example of Legend Properties Dialog
- f) Adding a North Arrow and a Scale
- g) Inserting Textual Information
- h) Layout Tools
- i) Printing and Plotting Maps
- j) Exporting Maps as Digital Files

5) OTHER APPLICATIONS
- a) Brief Overview of ArcGIS Extensions
  - i. Spatial Analyst
  - ii. Network Analyst
  - iii. 3D Anaylist
  - iv. Publisher
  - v. Maplex

REGIS ArcGIS Training II

6) INTRODUCTION
- a) Welcome
- b) Logistics
- c) Overview of REGIS GIS Applications
  - i. ArcMap
  - ii. ArcCatalog
  - iii. ArcToolbox
- d) Introduction to ArcGIS extensions
  - i. 3D Analyst
  - ii. Spatial Analyst
  - iii. Network Analyst
- e) Getting "Online" Help

7) SPATIAL DATA INTRODUCTION
- a) Features and Attributes
- b) Spatial Data Formats
  - i. Coverage
  - ii. Shapefile
  - iii. Geodatabase
  - iv. CAD Files
- c) Using ArcCatalog
  - i. The Contents Tab
  - ii. The Preview Tab
  - iii. The Metadata Tab
- d) Connecting to Folders

8) SELECTING DATA
- a) Why do you need a selection?
- b) Available Selection Tools
  - i. Selection Layers
  - ii. Selection Methods
  - iii. Interactive Selection Options
  - iv. Attribute Selection
  - v. Select by Location (Spatial Query)
  - vi. Location Selection Methods
  - vii. Select by Shape or Graphic
- c) Calculating Summary Statistics

9) WORKING WITH TABLES
- a) Tables
- b) Understanding Table Anatomy
- c) Table Manipulation
- d) ArcGIS Tabular Formats
- e) Associating Tables
- f) Table Relationships
- g) Joins and Relates
  - i. Connecting Tables with Joins
  - ii. Connecting Tables with Relates
- h) Graphs
- i) Reports
  - i. The ArcMap Report Writer
  - ii. Crystal Reports

10) SYMBOLIZING AND DISPLAYING DATA
- a) Layer Symbology in ArcMap
  - i. Displaying Qualitative Values
  - ii. Displaying Quantitative Values
  - iii. Classifying Quantitative Values
  - iv. Changing the Symbol Properties
- b) Labeling Features
- c) Creating a Definition Query ("Filter")
- d) Saving a Layer File

11) CARTOGRAPHIC DESIGN
- a) Overview
- b) Map and Design Objectives
- c) Factors Controlling Cartographic Design
- d) Communication in Maps
- e) Types of Maps
- f) Issues in Cartographic Design
- g) Creating Maps in ArcMap
- h) Setting Up the Page
- i) Inserting Map Elements
- j) Example of Legend Properties Dialog
- k) Adding a North Arrow and a Scale
- l) Incorporating a Reference System
- m) Inserting Textual Information
- n) Layout Tools
- o) Grids and Rulers
- p) Creating and Using Map Templates
- q) Printing and Plotting Maps
- r) Exporting Maps as Digital Files