

INTERMEDIATE MAPINFO/DISCOVER SHORT COURSE PROPOSAL

Course Title

Intermediate MapInfo Professional/Discover for Geologists

Course Description

The course is ideal for geologists who are already familiar with the basics of the most current version of MapInfo Professional and Discover mineral exploration extension for MapInfo. MapInfo Professional and Encom software are recognized as current industry standards. The software combination, designed especially for the geosciences, provides the tools to effectively compile, visualize, analyze and map spatial geosciences data. The course consists of a series of lectures and hands-on exercises for clients wanting to get the most out of their surface sampling and downhole exploration data. The course has been customized to allow participants to work with their own data sets and produce maps and data analysis which they can immediately implement.

Specific Objectives

Participants will learn how to:

- Use ODBC connections in MapInfo
- Build SQL Queries
- Analyze and visualize geochemical data.
- Generate graphs to gain insight to your data.
- Compile drillhole data and create cross-sections, plans and logs.
- Animate a map window and create movies files.
- Share and modify workspaces.
- Add HotLinks to your maps to make them interactive, turn any map into a clickable web page
- Display MapInfo objects in Google Earth.

Course Audience – Who Should Attend?

The course is designed for geologists, cartographers, exploration managers, exploration technicians, students, and others involved with GIS and map making in mineral exploration. The course is recommended for any professional with a working knowledge of MapInfo Professional / Discover.

Estimated Number Of Pages Of Course Notes

150 pages

Course Duration

2 days

Agenda

Day One

Day Two

Opening an Access table via ODBC in MapInfo Professional

SQL Select command (Query menu)

Geochem Utility

Graphing your Data

Exercise - Graphing with MapInfo

Drillhole Display

Drillhole Display (Con't.)

Make Movie or Animation

Working with Workspaces

Internet Connectivity

Using the Google Earth™ Link Utility

Exercise - Adding Points to Google Earth

Prerequisites:

Windows familiarity is required and knowledge of MS Excel and Access is beneficial. A working knowledge MapInfo / Discover is necessary. Each attendee is required to provide their own laptop. An evaluation license for both MapInfo and Discover will be provided for the duration of the course. Attendees are encouraged to bring their own data sets.

Special Features

The course provides each attendee with a workbook, documentation, data sets and an evaluation license to the current versions of both MapInfo and Discover where required. See attached Course Outline for the Table of Contents from course workbook.

Course Instructor

Barbara Carroll

Barbara Carroll is a Principal Consultant and Founder of GeoGRAFX. Her firm provides professional and technical geological services and products to the resource exploration and mining industries worldwide. Ms. Carroll is a certified Professional Geologist by the American Institute of Professional Geologists with over 30 years of wide ranging international exploration experience in the mining industry. Immediately prior to forming GeoGRAFX, Ms. Carroll served as Project Manager for Phelps Dodge Mining Co.'s Jerome Project, a multi-million dollar preliminary evaluation of the remaining potential of the United Verde Mine in Arizona which resulted in completion of a new geologic model and preliminary resource estimate. Prior to working for Phelps Dodge, she was Systems Geologist at Battle Mountain Gold Co., and responsible for resource evaluation and selection and support of software/hardware for all US Exploration offices as well as remote computer communications. She has extensive experience in construction of geologic models and resource/reserve estimation, as well as creation and management of GIS databases.

Course History:

This course was developed in response to the requests of geologists and mining consultants who recognize the need to expand and update their skill set. In the highly competitive world of mining, the ability to quickly and easily map and analyze data has become increasingly important. MapInfo Professional and Encom Discover software are the industry data analysis tools of choice.

Course Outline

Lesson 1: Opening an Access table via ODBC in MapInfo Professional

Managing Datasources with the ODBC

Administrator

What Is the ODBC Administrator?
ODBC.INI and ODBCINST.INI (Registry Keys)

Setting Up an MS Access Datasource
To add a new MS Access DataSource
In Microsoft Access:

MapInfo DBMS Catalog Utility

- A. Create the Map Catalog:
- B. Make the DBMS Table Mappable.
- C. Opening the DBMS Table.

Lesson 2: SQL Select command (Query menu)

Making Queries using the SQL Select Command
Grouping and Ordering Your Data

Calculating Derived Columns

Finding Duplicate Records

Joining map objects from one table to records in a second table

Finding Points within a Region

Selecting Alternate Records

Aggregating Data

Lesson 3 – Geochem Utility

Point Classification

Data Leveling

Summary Statistics

Compute Correlation Matrix

Lesson 4: Graphing your Data

Open the Soils map

Graphing with MapInfo

XY Scatter Plots in MapInfo

Discover GraphMap

Creating an XY Scatter Matrix Graph - New

Interactive Graphing Tool

Creating a XY Scatter Graph Old version

Creating a Ternary Plot with GraphMap

Creating a Stereogram using GraphMap

Creating a Rose Diagram from GraphMap

Respecifying Graph Properties

Exercise 4 (a different dataset)

Graphing with MapInfo

Scatter plots

Lesson 5- Drillhole Display

An Exercise in Drillhole Display

Data Sources

Preparing Data Prior to Viewing Drillholes

Merging of Sample Data and Assay Data

Opening the remaining Access tables in MapInfo

Create Objects for the Collars

Generation of Contours from the Collar Elevations

Creating Sections

Setup Discover to create Sections

Section Manager

Step 2 – Validating your Database

Step 3 – Produce a Drillhole Plan

Step 4 – Select the Collars to include in the Section

Step 5 – Section Manager

Step 6 – Extracting Maximum and EOH values

Step 7 – Editing Display Color Patterns for sections

Step 8 – Annotate the Sections

Step 8 (optional) – Using Previously Created Sections

Step 11 – On-screen Interpretation

Step 12 – Generating Sectional Resources

Step 13 – Downhole Compositing of Attribute Data

Step 14 – Printing a Drillhole Section

Lesson 6 - Make Movie or Animation

Lesson 7: Working with Workspaces

Packaging Workspaces

Workspace Packager (MapInfo Tools)

Save Tables and Workspace (Discover)

Editing Workspaces

Workspace Resolver (MapInfo Tools)

Open Workspace Advanced

Workspace Editor (Discover)

Lesson 8: Internet Connectivity

What are Active Objects?

Creating Active Objects using MapInfo

Modifying Your Table

Setting the HotLink Options

Adding the Path to the Filename

Saving HotLink Options to Metadata

Using the HotLink Tool

Using the HotLink Tool in Browser Windows

Document Linking using Discover

Document Link Setup

Link Document to Map Object

Open Linked Document

Using the HTML Image Map Tool

HTML Landing Pages

Selecting Columns

Using Column Name Aliases

ToolTips

Lesson 9: Using the Google Earth™ Link Utility

Google Earth Licensing Information

What is MapInfo's Link Utility?

Loading/Autoloading Google Earth Connection Utility

Exporting your Data to Google Earth

Enhancing the Display of your Exported Map

Exporting your Map Selection to Google Earth

Exercise 9: Adding Points to Google Earth