

# Using Terra Vista Course Syllabus

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Session duration: Classroom 4 days

## Main Objective

In this course, you will learn how to use Terra Vista to import and compile data to publish a database in a supported Terra Vista format.

Upon completion of this course, you will understand the best practices for database construction, and how to correct and add culture to Terra Vista projects.

## Target Audience

This is an ideal course for a new Terra Vista user, regardless of your database creation experience, as it completely familiarizes you with the Terra Vista database building methodology.

## Prerequisites

This course assumes basic PC knowledge.

## Format

This instructor-led course is taught through a series of lectures and hands-on exercises in which you learn how to use all of the components of the tool.

## Topics covered

- Terra Vista Introduction
- Terra Vista Overview
- General Terrain Design
- General Culture in Terra Vista
- Selectors and Feature Styles
- Assets
- Complex Features
- \*MetaFlight Compiler
- \*VBS2 Compiler
- \*CDB

\*Optional topics

# Daily Outline for Classroom “Using Terra Vista” Course

## Day 1

- Lesson 1: Terra Vista Introduction
- Lesson 2: Terra Vista Overview

## Day 2

- Lesson 3: General Terrain Design
- Lesson 4: General Culture in Terra Vista

## Day 3

- Lesson 5: Selectors and Feature Styles
- Lesson 6: Assets

## Day 4

- Lesson 7: Complex Features
- Lesson 8: \*MetaFlight Compiler
- Lesson 9: \*VBS2 Compiler
- Lesson 10: \*CDB
- Recap of the 10 lessons
- Questions and Answers specific from trainees
- Closing the course

# Detailed Description

## Lesson 1: Terra Vista Introduction

- Introduction
- Terra Vista workflow
- Direct hands-on approach
- EXERCISE 1-1: My first database
- EXERCISE 1-2: Looking at the project
- EXERCISE 1-3: Building and viewing the terrain
- Adding or modifying culture data
- EXERCISE 1-4: Creating a linear feature
- EXERCISE 1-5: Creating an areal feature
- EXERCISE 1-6: Creating a point feature

## Lesson 2: Terra Vista

- What is Terra Vista?
- Terra Vista interface overview
- EXERCISE 2-1: Navigating through the GUI
- EXERCISE 2-2: Others GUIs from the ribbon
- 3-D Viewer
- EXERCISE 2-3: Looking at the 3-D Viewer
- Your project folder
- EXERCISE 2-4: Looking at the sample project

## Lesson 3: General terrain design

- Introduction
- Database workflow in Terra Vista
- Terrain planning and design considerations
- Datums and ellipsoids overview
- Elevation overview
- Geospecific imagery
- Terrain design
- EXERCISE 3-1: New project for Spokane
- EXERCISE 3-2: Spokane LODs

## Lesson 4: General culture in Terra Vista

- Introduction
- Culture overview
- EXERCISE 4-1: Adding linears vectors

- EXERCISE 4-2: Areal
- EXERCISE 4-3: Importing vectors for Spokane
- EXERCISE 4-4: Disabling vectors for Spokane

### **Lesson 5: Selectors and Feature Styles**

- Introduction
- Vector selection workflow
- Feature Styles
- EXERCISE 5-1: Modifying a Feature Style
- EXERCISE 5-2: Creating a derived Feature Style
- EXERCISE 5-3: Changing the assigned Feature Style
- EXERCISE 5-4: Fixing the Spokane Project river
- EXERCISE 5-5: Optional work on Spokane

### **Lesson 6: Assets**

- Assets
- 3D models
- EXERCISE 6-1: Importing a 3D Model
- EXERCISE 6-2: Creating a vector with the new model
- EXERCISE 6-3: Importing models in the Spokane Project
- Buildings for areal vector
- Building Wizard (from Creator)
- EXERCISE 6-4: Making Wizard Buildings vectors
- EXERCISE 6-5: Making a Wizard Building Feature Style
- EXERCISE 6-6: Editing a Wizard Building
- EXERCISE 6-7: Creating a Wizard Building
- Complex building lists
- Model lists for fixed points
- EXERCISE 6-8: Making a new model list
- Bridges
- EXERCISE 6-9: Making a new bridge
- EXERCISE 6-10: Making a wizard bridge
- EXERCISE 6-11: Making a Feature Style that uses a wizard bridge

### **Lesson 7: Complex features**

- Range limits
- EXERCISE 7-1: Looking at range limits
- EXERCISE 7-2: Modifying range limits
- Variable LODs

- EXERCISE 7-3: Variable LODs
- Large model integration
- EXERCISE 7-4: Implementing a site model
- Intersections
- EXERCISE 7-5: Modifying an overpass
- EXERCISE 7-6: Modifying intersections

### **Lesson 8: MetaFlight compiler**

- MetaFlight
- Setting up the MetaFlight compiler
- Files produced by the MetaFlight compiler
- What is VSB? (Vega Scene Graph Binary)
- EXERCISE 8-1: Producing a MetaFlight output
- EXERCISE 8-2: Producing a VSB output

### **Lesson 9: VBS3 compiler**

- Objectives
- VBS3
- General terrain considerations for VBS
- Workflow for producing VBS terrain
- EXERCISE 9-1: Making a terrain in Terra Vista
- EXERCISE 9-2: Configuring Terra Vista for VBS2
- EXERCISE 9-3: Building the VBS3 terrain
- EXERCISE 9-4: Using the VBS3 Packer
- EXERCISE 9-5: Running VBS3 to view your terrain
- VBS2 Surface Mask
- Implementation in Terra Vista

### **Lesson 10: CDB**

- CDB overview
- CDB data organization
- Downloading the CDB specification
- Typical CDB structure
- Producing a CDB with Terra Vista
- EXERCISE 10-1: Producing a CDB database
- EXERCISE 10-2: Fixing vectors for CDB database
- EXERCISE 10-3: Fixing scatter trees for CDB
- EXERCISE 10-4: CDB extra, Tiled 2D Models