

## 3D Studio MAX Training Course Outline

### **LESSON 1 - Interface**

- User Interface
- Viewpoints
- Command Panel
- Viewpoint UI Elements

### **LESSON 2 - Files & Objects**

- Scene File Manipulation
- Simple Geometry Creation & Pivot Points
- Object Orientation
- Modifying Standard Objects
- Selecting Objects
- Organization of Objects in a Scene

### **LESSON 3 - Transforms**

- Transform Tools
- Transform Base Point
- Coordinate Systems
- Align
- Cloning Objects
- Other Transforms

### **LESSON 4 - Applying Modifiers**

- Concepts of the Modifier Stack
- Modifiers
- Noise
- Collapsing the Stack

### **LESSON 5 - Low-Poly Modeling**

- Objects and Sub-Objects
- Sub-Object Levels
- Smoothing Groups
- Using Subdivision Surfaces

### **LESSON 6 - Shapes**

- Shape Definitions
- Basic Shape Creation Functions
- Editing Splines
- Adding Splines from a Shape
- Segment Editing
- Vertex Editing
- Using Shape Modifiers

### **LESSON 7 - Compound Objects**

- Booleans
- ProBoolean Operations
- Lofts
- Scatter Tool

### **LESSON 8 - Modeling Lab**

- Creating an Underwater Scene

### **LESSON 9 - Animation Basics**

- 2d vs 3d Animation
- Time
- Keyframeing
- Auto Key and Set Key
- Track View
- Time
- Ease in / Ease out
- Arcs
- Secondary Action
- Anticipation
- Follow-through & Overlapping
- Squash & Stretch
- Exaggeration

### **LESSON 10 - Hierarchies**

- Mechanics of Movement
- Linking Objects
- Schematic View
- Hierarchy

### **LESSON 11 - Character Anim.**

- Biped
- Skinning the Character
- Motion Panel
- The Mechanics of a Walk Cycle
- Animation Principles

### **LESSON 12 - Animation Lab**

- Planning the Animation
- Attack of the Pawn
- Animating the rook
- Analysis the Rook

### **LESSON 13 - Materials**

- Introduction to Materials
- The Matrial Editor
- Material Types

### **LESSON 14 - Using Maps**

- Maps in Material Definitions
- Map Types
- Displating Maps in Viewpoint
- Mixing Maps

### **LESSON 15 - Mapping**

- Mapping
- Unwrap UVW
- Render to Texture

**LESSON 16 - Cameras**

- Camera Types
- Framing a shot
- Camera Lenses
- Camera Aspect Ratio
- Camera Angles
- Perspective
- The Moving Camera

**LESSON 17 - Lighting**

- Light Types
- Lighting Techniques
- Light Lister

**LESSON 18 - Mental Ray**

- Mental Ray
- The Arch & Design Material
- Lighting

**LESSON 19 - Rendering**

- Rendering
- Time Output
- Output Size
- Ram Player
- Batch Render