

C O U R S E N O T E S



Programming with OpenGL: An Introduction

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Course Outline

Part 1: Introduction

- What is OpenGL?**
- OpenGL Architecture**
- Overview of features**
- OpenGL and the window system**
- Typical program structure**

Part 2: A Simple OpenGL Program

- States**
- Geometry primitives**
- Pixel primitives**
- A wireframe model**
- Hidden surface removal**
- Simple shading**



Course Outline

Break

Part 3: Transforms and Materials

- Lights and materials**
- Texture mapping**
- 3D viewing model**
- animating**

Part 4: Advanced Features

- Buffers**
- Fragment operations**
- Optimization Techniques**

Summary and References, Q&A



Part 1: Introduction

- ◆ **Introduction to OpenGL**
- ◆ **OpenGL Architecture**
- ◆ **A Simple OpenGL Program**
- ◆ **OpenGL Feature Summary**
- ◆ **OpenGL and the Window System**
- ◆ **Typical Program Structure**



Part 2: Writing a Simple Program

- ◆ **OpenGL State**
- ◆ **Geometry Primitives**
- ◆ **Pixel Primitives**
- ◆ **Rendering a Wireframe Model**
- ◆ **Hidden Surface Removal**
- ◆ **Simple Shading**

