

CSCI 440 Intro to Computer Graphics - Fall 2006

Review for Final Exam

Stuff from 1st Half of semester that was also on Mid-Term

Not Important

- matrix math
- OpenGL code to draw a polygon

Somewhat Important

- vertex arrays
- display lists
- how the depth test works

Important

- order of transformations
 - also worry about how to use push and pop
 - be sure to review question 10 from midterm (the airplane with radar dish)
 - review the course notes for Sept 26
- flush v. finish

New Stuff covered since the Mid-Term Exam

Not Important

- pixel operations
 - copyPixels, ReadBuffer, WriteBuffer, etc

Somewhat Important

- how to create a simple shadow
 - don't worry about remembering that weird matrix
- purpose of the built-in fog effect
- basic idea of how to use an alarm signal to control timing
- Frame Buffer Operations
 - Scissor Test
 - Stencil Test
 - Accumulation Buffer

Important

- concept of a "frustrum"
 - what the effects of changing near, far, width, etc
- normalized vector v. normal vector
 - what are normalized device coordinates
- lighting
 - meaning and purpose of specular, diffuse, ambient, etc
 - how light properties and material prosperities interact
 - what is the "Phong Reflection Model"
 - how does OpenGL decide if a light is local or distant
 - what is "attenuation"
 - shade model : smooth v. flat
- textures
 - steps to create and apply
 - mipmaps
 - minification
- how blending works
 - most common function = (src_alpha, one_minus_src_alpha)
 - how to blend in 3D
- how curve drawing works
 - what is a NURBS
 - knots