

CSCI-4961/6961: 3D Computer Graphics  
Class 9: September 28, 2006  
**Illumination and Shading 2**

## **Today's Class**

We will continue our discussion of illumination and shading from last class.

1. Illumination recap, and specifying lighting in OpenGL
2. Computing normal vectors to a surface, and transforming surface normal vectors
3. Shading: Flat shading, Gouraud (smooth) shading, Phong shading
4. Physically realistic lighting models

## **Reading**

Chapter 10 through 10.3, Chapter 10.10, and Chapter 10.20 of Hearn and Baker.  
Chapter 5 of the OpenGL red book.

## **Activity**

Try Nate Robins' OpenGL *lightposition* and *lightmaterial* tutorials.

## **Next Class**

Ray tracing (Chapter 10.11 of Hearn and Baker).