

THE GEORGE WASHINGTON UNIVERSITY
Department of Computer Science
CS 6554 - Computer Graphics II - Spring 2023

Assignment 3 Due: March 23
Shading and Illumination Modeling

Description: You are to augment assignment 2 by implementing three shading algorithms (constant, Gouraud, and Phong). Use Phong specular illumination model. You can assume that the light and the eyepoint are infinitely far away.

Input:

- a) Geometric data for polygonal objects
- b) Viewing parameters
- c) Lighting parameters

Output: Constant, Gouraud, **and** Phong shaded views of objects

Hand in:

- Put source code on BlackBoard submit section
- Place some images you generated on BlackBoard discussion board.

Extensions: Use a more complex illumination model: local illumination, area light sources, etc. Implement “fake shadows” on the floor. Implement a more accurate shadow algorithm.