

**THE GEORGE WASHINGTON UNIVERSITY**  
**Department of Computer Science**  
**CS 6554 - Computer Graphics II - Spring 2019**

**Assignment 3 Due: March 21**  
**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.