## CPSC 360 Final Project Shock and Awe Due: 1-27@6p.m.

**Overview:** Your final assignment is to render a scene of your choice. It could be a battlefield, it could be a country road...it could even be Beckman Hall. In the end, the subject of your scene doesn't matter, but the techniques you use to render it will contribute heavily toward your final grade. For this assignment, you are required to meet the following guidelines:

- Your scene should be three-dimensional
- Your seen must have at least 1 animated object
- Your scene must demonstrate some OpenGL lighting techniques.

In addition to the above, your scene should implement at least 2 of the following options:

- Texture mapping
- First person mode (let's you navigate around the scene at "ground level.")
- Flight mode (let's you fly over the scene)
- Rotation Mode (starting from a fixed camera point, dragging the mouse rotates the scene)
- Time of Day (morning turns to night over time)
- Weather (fog, clouds, etc)

Each of these options (except for texture mapping) should be turned on or off by menu. For the navigation options, the user should be able to move using the arrow keys.

**Hints:** For this project, the "Red Book" will be your best friend. I will also provide some handouts on the course site that give examples of texture mapping, as well as a demo I have coded to show off some lighting techniques. You may refer to one another for ideas and debugging help, but all code should be your own.

**Grading:** Grading will be based on meeting the above criteria. Projects that go above and beyond the requirements will receive up to 10% extra credit.

**Competition:** After the final on the last day of the course, you will demonstrate your work to the class. The class will vote for their favorite scene, which will be named the "grand prize" winner.