

# MAT 494 — SpTp: Computer Graphics, Spring 2005

## Homework #8, Due on Friday, March 25th

In this homework you will be writing a proposal for your final project. This project may be an ultimate collection of the materials talked about in this class, or any other subject matter in computer graphics. Some ideas might be: a 3D space fighter, a racing engine, a realistic ray tracing engine, and many more. The proposal will include this paper along with a ten minute proposal presentation on Thursday March 31th. We'll use this presentation time to help further hone your project. Tuesday (29th) will be used as a review session for me to go over your proposals with you individually. The final project will end in a 30 minute demonstration during one of the last three class periods.

### **Homework Requirements:**

1. Your proposal should have an introduction. This introduction should clearly state the goal of your final project and what the final product will be. Don't simply state the final goal, but go into detail about the experience of using the system. For example, don't say that you simply wish to write a ray tracer. Discuss the materials you wish to implement, the lighting that will be available, and what kinds of things the user will be able to do with the engine when it is completed. Discuss how the user might use the system for general purpose rendering.
2. Include an itemized list of elements (at least four) that must be solved by your system to make it worthwhile. Explain these elements and how you might solve them. Give two possible solutions to each of the problems. Which is better and why?
3. Explain why each of your elements is important to the goal of your final product. Rate these elements in order of importance to the final product. Explain why you decided certain elements are more important than others.
4. Include an estimate of the period of time it will take to implement each of these elements. Think about not just coding time, but testing and debugging as well. Discuss why you've chosen each time limit.