CMSI 671

COMPUTER GRAPHICS (GRADUATE LEVEL)

Spring 2007

Midterm Review Sheet

The midterm will take place as scheduled, on February 20. It will be open everything: book, notes, and handouts; open computer depends on whether or not everyone has access to a computer during class (which means that either we can have the test in the Keck lab, or everyone has a laptop that they can use). This guide should help you to prepare for the midterm properly.

Covered Material

The midterm covers the following areas, including all handouts and sample code that have been distributed in support of this content:

- Angel Chapters 1–4, portions of Chapter 5 (particularly Sections 5.1–5.3 and 5.5), and Appendices B and C
- Red book Chapters 1–5, and parts of Chapter 9
- Working knowledge of C and OpenGL

Sample Tasks and Questions

The following represent the types of questions or tasks that you may be asked to accomplish:

- Given some basic OpenGL code, figure out what it does (or figure out what's wrong with it)
- Accomplish simple graphics activities in OpenGL
- Identify corresponding or equivalent components in different graphics systems
- Describe, analyze, or solve a problem dealing with 3D viewing concepts such as viewing volumes, lighting and materials, transforms, camera positioning, and window sizing
- Perform calculations involving the digital representation of color
- Calculate or infer memory-related values for a graphics device, including display resolution, pixel depth, aspect ratio, number of buffers and/or screens, and direct vs. indirect color lookup
- Perform calculations or proofs involving points, vectors, and their related operations
- Perform calculations or proofs involving matrices and transforms