

CMSI 371

COMPUTER GRAPHICS

Spring 2010

Final Exam Review Sheet

The final exam will take place on May 6, at 11:00am. It will be open everything: book, notes, handouts, and computer (which means that we will have the test in the Keck lab, with everyone using either a lab workstation or a personal machine). This guide should help you to prepare for the final properly.

Covered Material

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

- In detail — Angel Chapters 1–7, Angel Appendices B and C, and red book Chapters 1–5, 8–9, Appendices E and F
- In general — Angel Chapters 8–11 and red book Appendices A, B, and D
- Working knowledge of C and OpenGL

Sample Tasks and Questions

In addition to the types of questions that were fair game for the midterm, the following represent questions or tasks that you may be asked to accomplish for the final:

- “Expose” some OpenGL function by explaining how it works or by providing an implementation of that function
- Derive an algorithm or prove a theorem relating to transformations and projections
- Discuss or explain a particular computer graphics algorithm (some type of transformation, clipping, hidden surface removal, lighting, polygon scan conversion, etc.)
- Modify a computer graphics algorithm (transforms, clipping, hidden surface removal, lighting, polygon scan conversion, etc.) according to some specification, or explain why the requested modification cannot be made
- Answer a “big picture” question regarding the overall area of computer graphics, spanning the entire journey from modeling to world space to the screen or viewport