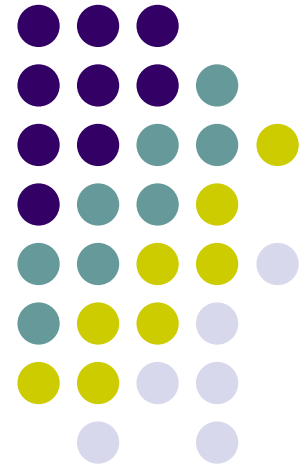


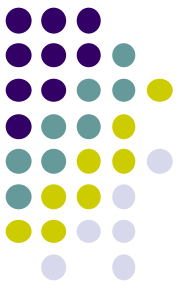
Computer Graphics

CS 4731 – Final Review

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Exam Overview

- Tuesday, December 13, 2016 in-class
- Midterm covered up to lecture 10 (Rotations and Matrix concat.)
- Final covers lecture 11 till today's class (lecture 24)
- Can bring:
 - 1 page cheat-sheet, hand-written (not typed)
 - Calculator
- Will test:
 - Theoretical concepts
 - Mathematics
 - Algorithms
 - Programming
 - OpenGL/GLSL knowledge (program structure and commands)



Modeling and 3D Viewing

- Implementing transforms (what goes in .cpp, what goes in shader)
- Drawing with Polygonal meshes
- Hierarchical 3D modeling
- Lookat(Eye, COI, Up) to set camera
 - How to build 3 new vectors for axes
 - How to build world-to-eye transformation



Topics

- Projection
- Lighting, shading and materials
- Shadows and fog
- Texturing & Environment mapping
- Clipping (2D and 3D clipping) and viewport transformation
- Hidden surface removal
- Rasterization (line drawing, polygon filling, antialiasing)
- Curves