

COMP3201 – Topics and Resources (Semester 1, 2006)

References are to textbook (3rd or 4th edition), variations in 4th edition are in bold.

Week #	Lecture #	Topic	Angel textbook	COMP3201 Web Notes
Week 1	L1	Admin and Course Overview		
	L2	Introduction to OpenGL	2.7	1.1, 1.2.1, 1.2.2
Week 2	L1	Introduction to Computer Graphics	Ch. 1; 2.3	
	L2	OpenGL Primitives, colour	2.4, 2.5	1.3.1-1.3.6, 1.3.12, 1.3.13
Week 3	L1	Program Structure, GLUT details, event loop	2.7, 3.2, 3.5	1.2.3-1.2.8
	L2	Lines & Strips, simple orthographic projection, GLUT 3D models	2.4, 2.6	1.3.7-1.3.12, 2.5
Week 4	L1	Viewing, viewports, aspect ratio, display lists	3.4, 2.7.2	1.4
	L2	Geometry (basics); homogeneous coordinates, transformations in 2D (and in OpenGL)	Ch. 4	2.1, 2.2
Week 5	L1	Transformations in 3D	Ch. 4	2.3
	L2	OpenGL Transformations, Push/Pop, matrix stacks	4.9, 4.10	2.3.9, 2.3.10
Week 6	L1	Classical Viewing, gluLookAt	5.1-5.4	2.4
	L2	Projections in OpenGL, viewing transformations, HUD	5.5, 5.7-5.9	2.4
Week 7	L1	Depth Buffering, Culling, Scene Creation	5.6	2.8, 2.6
	L2	Animation, Surface of Revolution, Double Buffering	3.9, 3.10	3.1, 2.7
Week 8	L1	ANZAC DAY		
	L2	Fractals	11.7	2.9
Week 9	L1	Picking and Normals	3.7	
	L2	Lighting and Materials (1 st half)	Ch. 6	3.3
Week 10	L1	Lighting and Materials (2 nd half)	Ch. 6	3.3
	L2	Texturing (1 st half)	7.5, 7.6, 8.6-8.8	3.4
Week 11	L1	Texturing (2 nd half)	7.5, 7.6, 8.6-8.8	3.4
	L2	Sampling and Aliasing	7.11, 8.13	
Week 12	L1	Blending and anti-aliasing and fog	7.9, 8.11	3.2, 3.5
	L2	Quaternions	4.10, 4.11, 4.12	3.7
Week 13	L1	Introduction to Curves and Surfaces	Ch. 11	
	L2	Curves and Surfaces	Ch. 11	