



Outcomes		HW 0129	HW 0212	HW2 0212	HW 0226	HW2 0226	HW 0319	HW 0326	HW 0404	HW 0418	HW 0502	Final	Totals	
1	Represent, model, and create visual information digitally.												+	8
1a	...in terms of pixels and geometric primitives.		+											8
1b	...in terms of polygon meshes: vertices, edges, and faces.												/	2
1c	...as a composition of multiple discrete objects (scenes).						/		/	/		/	-	0
2	Manipulate and display visual information in 2D and 3D.												O	0
2a	Apply transforms to 2D and 3D objects.									+		+		
2b	Project 3D objects onto a 2D viewport.								+			+		B-
2c	Perform color and light computations.				/						/	/		
2d	Perform clipping and hidden surface removal (HSR).										+	+		
3	Use and develop computer graphics APIs in both 2D and 3D.													
3a	Animate scenes in 2D and 3D.								/	+		+		
3b	Implement 2D graphics primitives such as line segments, circles, and polygon fills.													
3c	Perform bit-level color manipulation.													
3d	Develop a library of geometric primitives, operations, and matrix transformations.						/		+			+		
3e	Render a 3D scene using programmable shaders.								/					
4	Follow academic and technical best practices throughout the course.													
4a	Write syntactically correct, functional code.						/	+	/		/			
4b	Demonstrate proper separation of concerns.		/			+	+	+	+	/	/			
4c	Write code that is easily understood by programmers other than yourself.	+	+		/	+	+	+	/	/	/			
4d	Use available resources and documentation to find required information.	+	+			+		+		+		+		
4e	Use version control effectively.	+	+		+		+	+	+	+	+	+		
4f	Meet all designated deadlines.	+			+		+	+		+	+	+		

IOU re-reviews of HW 0319, 0326, 0404, and 0502.