



Outcomes		HW 0129	HW 0212	HW 0226	HW2 0226	HW 0319	HW 0326	HW 0404	HW2 pipe	HW 0418	HW 0502	Final	Totals	
1	Represent, model, and create visual information digitally.												+	9
1a	...in terms of pixels and geometric primitives.		+		+							+		7
1b	...in terms of polygon meshes: vertices, edges, and faces.					/			+			+	/	2
1c	...as a composition of multiple discrete objects (scenes).					/		o	/			/	-	0
2	Manipulate and display visual information in 2D and 3D.												o	0
2a	Apply transforms to 2D and 3D objects.						/	o	/					
2b	Project 3D objects onto a 2D viewport.						/	-	+			+		
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.							o						
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.					/	/	o	/			/		
3e	Render a 3D scene using programmable shaders.							o						
4	Follow academic and technical best practices throughout the course.													
4a	Write syntactically correct, functional code.		+	/	+	/		o	/		/			
4b	Demonstrate proper separation of concerns.		/	+		+	+	o	+	+	+	+		
4c	Write code that is easily understood by programmers other than yourself.	/	+	/	/	/		o	+	+	+	+		
4d	Use available resources and documentation to find required information.	+	+	/	+	/		o		+		+		
4e	Use version control effectively.		+	+		/		o	+		+	+		
4f	Meet all designated deadlines.	+	+			/		-		/				

The “HW2 pipe” column represents the cumulative re-evaluation of your resubmissions for HW 0319, 0326, and 0404. It made more sense to evaluate them collectively because they all affect the same code.