



Outcomes		HW 0129	HW 0212	HW 0226	HW2 0226	HW 0319	HW 0326	HW 0404	HW2 pipe	HW 0418	HW 0502	HW3 pipe	Final	Totals	
1	Represent, model, and create visual information digitally.													+	10
1a	...in terms of pixels and geometric primitives.		+		+								+		7
1b	...in terms of polygon meshes: vertices, edges, and faces.					/			+				+	/	1
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. The same goes for the “HW3 pipe” column at the end.