



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

**IOU re-reviews of HW 0212, 0319, 0326, 0404, and 0502.**