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

Totals

+	2
|	2
/	3
–	0
O	10