	Outcomes	HW 0129	HW 0212	HW 0226	HW 0319	HW 0326	HW 0404	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).				/		+	+	+
2	**Manipulate and display visual information in 2D and 3D.**								
2a	Apply transforms to 2D and 3D objects.		|			|	+	|	+
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.		|				|	|	|
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.	+	|	+	+	+	+	+	+

Totals

+	13
|	4
/	0
–	0
O	0

Your fixes to your matrix library unit tests have been noted and are reflected in an updated proficiency for *3d*.