

Stony Brook University I-STEM Engineering Teaching Labs Curriculum Alignment for High School					
NYS P-12 Science Learning Standards and NGSS					
				Light Strobe	Home Security
Structure and Properties of Matter & Chemical Reactions	HS-PS1	1			
		2			
		3			
		4			
		5		✓	✓
		6			
		7			
		8			
		9			
		10			
		11			
		12			
Forces and Interactions	HS-PS2	1			
		2			
		3			
		4			
		5			
		6		✓	✓
Energy	HS-PS3	1			
		2			
		3		✓	✓
		4			
		5		✓	✓
		6		✓	✓
Waves and Electromagnetic Radiation	HS-PS4	1			
		2		✓	✓
		3			
		4			
		5		✓	✓
		6			
NYS Regents Physics Curriculum					
		Key Idea	Performance Indicator	Light Strobe	Home Security
STANDARD 1: Analysis, Inquiry, and Design					
	Mathematical Analysis	1		✓	✓
		2		✓	✓
		3		✓	✓
	Scientific Inquiry	1		✓	✓
		2		✓	✓

		3		✓	✓
	Engineering Design	1		✓	✓
STANDARD 2: Information Systems					
		1		✓	✓
		2		✓	✓
		3		✓	✓
STANDARD 4: The Physical Setting					
		4	4.1	✓	✓
			4.1a	✓	✓
			4.1b	✓	✓
			4.1j	✓	✓
			4.1l	✓	✓
			4.1m	✓	✓
			4.1n	✓	✓
			4.1o	✓	✓
			4.1p	✓	✓
			4.3b	✓	
STANDARD 6: Interconnectedness					
		1		✓	✓
		2		✓	✓
		3		✓	✓
		4			
		5		✓	✓
		6		✓	✓
STANDARD 7: Interdisciplinary Problem Solving					
		1		✓	✓
		2		✓	✓
AP Physics 1					
				Strobe Light	Home Security
Content Area 9: DC Circuits		1	B	✓	✓
			E	✓	✓
AP Physics 2					
				Strobe Light	Home Security
Content Area 3: Electric Force, Field, and Potential		1	B	✓	✓
Content Area 4: Electric Circuits		1	B	✓	✓
			E	✓	✓
		4	B	✓	✓
			C	✓	✓
			E	✓	✓

Content Area 6: Geometric and Physical Optics		6	A		
			E		