IBMYP Subject Overview 2015-16

Subject Area: <u>Science Course</u>: <u>Physical Science MYP Level</u>: <u>2</u> Teacher(s): <u>Foss, Fritts, and Hopkins</u>

Time Frame (Dates)	Unit Title and Topic (*=interdisciplin ary connection; @=Action)	MYP Objectives	State Standards	Key Concept	Related Concepts	Global Context	Statement of Inquiry	MYP Assessment Task & ATL Focus	MYP Criteria	Learner Profile Focus
2 weeks	Science Process Skills	B i-iv	PS.1	Relationships	Evidence Functions	Fairness and development	Scientist use evidence and form to explain the connections and associations within the world in which we live.	IRP Blue Print communicati ons skills	B: Inquiring and designing	Principled
3 weeks	Principles of Work, Force, and Motion	C i-v	PS.10	Relationships	Energy Evidence Function	Scientific and technical innovation	The patterns of movement demonstrate the relationship between scientific laws and technical innovation.	Hex Bug Races	C: Processing and evaluating	Communicat ors
3 weeks	Energy and Energy Transfer	C i-v	PS.6 PS.7	Change	Condition Energy	Globalization and sustainability	Understandin g consumption of energy will determine the condition of sustainability	Energy Debate	B: Inquiring and designing	Open- minded

3 weeks	Classification and Physical Properties of Matter	B i-iv	PS.2 PS.7	Relationships	Conditions Function Evidence	Identities and relationships	The relationships and identities are based from evidence and function of matter.	Sunset in a Bag	B: Inquiring and designing	Knowledgeab le
2 weeks	Atoms and Atomic Models	A i-iii	PS.3	Systems	Balance Models	Orientation in space and time	Models cans be used to help explain the balance between orientation in space and time.	Unit Test	A: Knowing and understandin g	Reflective
3 weeks	The Periodic Table and Bonding	A i-iii	PS.4	Relationships	Models Patterns	Scientific and technical	Through innovation, relationships reflect and predict scientific patterns and interactions.	Unit Test	A: Knowing and understandin g	Inquirers
4 weeks	Chemical Properties and Chemical Changes	B i-iv	PS.2 PS.5	Change	Conditions Evidence Form	Identities and relationships	Evidence of a balanced form must be made when change occurs.	It is Balanced?	A: Knowing and understandin g	Balanced
1.5 weeks	Electricity and Magnetism	A i-iii	PS.11	Systems	Form Function	Scientific and technical innovation	Function of systems can be used to fuel creativity with scientific and technical innovation.	Electrical House	A: Knowing and understandin g	Caring
1.5 weeks	Nature of Sound and Light and	D i-v	PS.8	Systems	Form Function	Scientific and technical	Function of systems can	Musical Instrument	D: Reflecting on the	Inquirers

Applications		innovation	be used to	impacts of	
			fuel	science	
			creativity		
			with		
			scientific and		
			technical		
			innovation		

Support of Personal Project: (Develop a narrative description of the ways in which your class supports the skills students will need to complete the Personal Project from spring of their freshman year through fall of their sophomore year. Areas to consider include but are not limited to the development of students' autonomy, self-confidence, reflection, perseverance, time-management and organization, and research.)

In Physical Science, students will become scientific reflective practitioners by learning how to plan, collect and share data through hands-on activities. The activities will be designed by students and student centered much like the personal project. Through these activities, students will practice organization and time-management which will create self-confidence and perseverance.