

**IBMYP Subject Overview  
2015-16**

**Subject Area: Math Course: Algebra I MYP Level: 2 & 3 Teacher(s): Wilcox**

<b>Time Frame (Dates)</b>	<b>Unit Title and Topic (*=interdisciplinary connection; @=Action)</b>	<b>MYP Objectives</b>	<b>State Standards</b>	<b>Key Concept</b>	<b>Related Concepts</b>	<b>Global Context</b>	<b>Statement of Inquiry</b>	<b>MYP Assessment Task &amp; ATL Focus</b>	<b>MYP Criteria</b>	<b>Learner Profile Focus</b>
Sept-Oct	Order In the Court  (Integers, Fractions, Expressions, Pre-Algebra Prerequisites)  * Arts	A. Knowing and Understanding (Mid-Year Exam) C Communicating	A.1. A.2.	Relationships the connections and associations between properties	Pattern, Representation	Personal and Cultural Expression -because they will discover and express their ideas in a creative manner.	Learners use patterns and mathematical relationships to solve problems when expressing themselves creatively	Order of Ops Fashion Show  Mid-Year Exam  ATL Communication, Social, Self Management	A. Knowing and Understanding  C  Communication	Risk Takers
Oct-Dec	Balancing Act  (Equations and Inequalities)	A Knowing and Understanding (Mid-Year Exam) C. Communicating D. Applying math in real world context	A.1, A.4	Logic principles used to build arguments and reach conclusions	Equivalence, justification, model	Identities and relationships-relationships with friends	Reaching equivalent conclusions requires logic and recognizing relationships.	Write the equation of a word problem comparing money in the bank. Fill in the blanks from the answer to the equation: If Johnny works ___ hours and Jimmy works ___ hours when they will each have	A. Knowing and Understanding  C. Communication  D. Applying math in real world context	Balanced

								\$_____ in the bank. Mid-Year Exam ATL Critical Thinking		
Dec-Jan	Step In Time (Linear Equations)  * Science	A. Knowing and Understanding (Mid-Year Exam)  C Communicating  D Applying math in real world context	A.4, A5, A.6, A.7	FORM  the shape and underlying structure of an entity or piece of work	Measurement Model Justification Pattern	GLOBALIZATION AND SUSTAINABILITY  Students will explore the interconnectedness of human-made systems	Modeling underlying structure requires human made systems and use of patterns.	Students will research buildings, choose one and determine the slope of the line from the top of the building to where stairs would be. They will determine the number of steps.  Mid-Year Exam  ATL Social, Reseach	A. Knowing and Understanding  C Communicating  D Applying math in real world context	Inquirer
Jan-Feb	Systematic (Systems of Equations)	B Investigating Patterns  C Communication	A.4, A.5  A.9	Relationships-affecting large networks and systems	Representation, system, equivalence	<b>Orientation in time and space</b>  Students will explore the relationships	Relationships and connectedness within a system shows equivalence	Draw systems and make a stained glass window, organize similar equations and find solutions  ATL	C Communicating	Knowledgeable

						between, and the interconnectedness	cy.	Literacy Skills		
Feb-March	The Power of Powers (Polynomial computation)	B. Investigating Patterns  C Communicating	A.2	Relationships, Logic	Patterns Model	Orientation in time and space because they will explore relationships between, and interconnectedness of global perspectives	<u>Relationships model patterns</u>	A power point display showing examples of patterns either in nature or man made with an explanation of if they are a benefit or hindrance to our world Students will present their power point to the class.  ATL Self-management, communication	B. Investigating patterns  C Communicating	Open Minded
April-May	Little by Little (Factoring)	B Investigating Patterns	A.2 A.4	FORM- its organization, essential nature and external appearance.	Change Equivalence	Personal and cultural expression  Students will explore the ways in which we discover and express	Creativity expressed in simplest form exhibits equivalence form.	Students will be given a factoring problem and must break it down to all prime factors and then create their own example, not math related that expresses breaking down to	B Investigating Patterns	Thinker

						ideas, , extend and enjoy our creativity; our appreciatio n of the aesthetic.		simplest form.  ATL Communicat e, organize, research		

**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.)**