

8th Grade Compacted Math with Algebra 1
Teacher: Mr. Hernandez



MYP Mathematics
Grade 8
Compacted Math and Algebra I

COURSE DESCRIPTION

The MYP mathematics course serves as a bridge between lower-grades' mathematics and Algebra. This course will build a foundation of algebraic concepts. The concepts will focus on four areas: (1) Applying equations and inequalities in one and two variables; (2) Understanding the concept of functions and using functions to describe quantitative relationships; (3) Modeling and graphing functions; (4) applying the Pythagorean Theorem and the concepts of similarity and congruence. A variety of problem-solving techniques and technology will be used when applying these concepts, which will enable students to solve real-life application, routine and non-routine problems. The instructional approach will provide opportunities for students to work together collaboratively and cooperatively as they solve routine and non-routine problems. Communication strategies will include reading, writing, speaking, and critical listening as students present and evaluate mathematical arguments, proofs, and explanations about their reasoning. This course will provide a foundation for the development of justifications to support solutions and solution methods. Physical materials should continue to be part of the development of mathematical understanding. This course is designed to prepare students for Algebra I. This course will also emphasize international mindedness, communication of mathematics in multiple forms of expression, and further development of the IB learner profile characteristics such as reflection, open-mindedness and knowledge.

MYP AIMS

The aims of MYP mathematics are to encourage and enable students to:

- enjoy mathematics, develop curiosity and begin to appreciate its elegance and power
- develop an understanding of the principles and nature of mathematics
- communicate clearly and confidently in a variety of contexts
- develop logical, critical and creative thinking
- develop confidence, perseverance, and independence in mathematical thinking and problem solving
- develop powers of generalization and abstraction
- apply and transfer skills to a wide range of real-life situations, other areas of knowledge and future developments
- appreciate how developments in technology and mathematics have influenced each other
- appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- appreciate the contribution of mathematics to other areas of knowledge
- develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics
- develop the ability to reflect critically upon their own work and the work of others.



COURSE OUTLINE

School Year: 2018 - 2019			
Term 1	Term 2	Term 3	Term 4
Unit 1: Quantities, Rational & Irrational Numbers	Unit 4: Modeling Linear Functions	Unit 7: Quadratic Functions	Unit 9: One & Two Variable Statistics
Unit 2: Expressions, Equations, & Inequalities	Unit 5: Exponents & Exponential Functions	Unit 8: Interpreting & Graphing Functions	
Unit 3: Systems of Equations/Inequalities	Unit 6: Polynomial & Factoring		

GRADING SCALES (JPS AND IB)

: Student performance for IB assessments covers a variety of tasks. All MYP designated assignments, both formative and summative, will be assessed using MYP rubrics provided in the syllabus. The score, reported numerically from 0-8, is reported once every term in an MYP report card.

: One numerical grade will be reported per course each term. The numerical equivalent of the grade will consist of two major components: (1) the average of scores on tests, and (2) the average of scores on assignments (homework, class work, and independent work). The average of scores on tests will be given a weight of 30% and the average of scores on assignments will be given a weight of 70% when determining the numerical grade.

Grading Scale:

A- 100-90

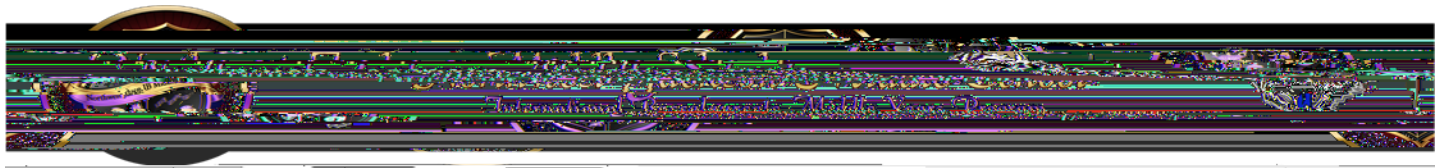
B- 89-80

C- 79-70

D- 69-60

F- 59 and below

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COURSE MATERIALS

Textbooks: Pearson Text Book

Other materials needed: pencils, paper, ink pens (for checking only), hand-held pencil sharpener, graphing calculator, compass, protractor, ruler, triple-a batteries, kleenex (optional)

Behavior Plan

Refer to Jackson Public School Student Code of Conduct Handbook

CLASSROOM RULES

1. Be on time for class and prepared to learn.
2. Bring all required materials
3. Be silent and orderly upon entering and leaving class.
4. Raise your hand to request to speak or leave your seat.
5. Be respectful and courteous to everyone.

Classroom Procedures

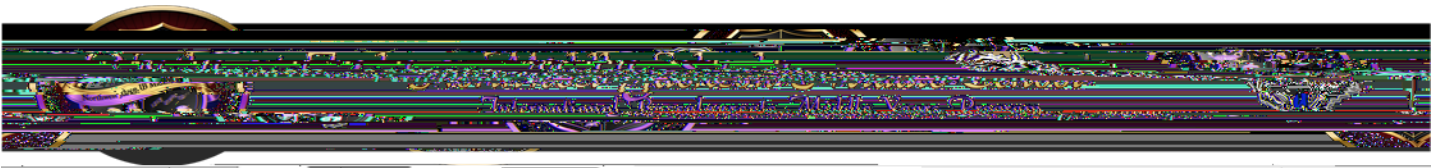
Before Class..

1. Enter and begin class without talking
2. Take out completed assignments done at home. (Homework or extra practice)
3. Begin and complete the bell ringer within the time noted after the tardy bell.
4. Write the current homework assignment on the board.
5. Take out materials for the class. (calculators, pencils, notebooks, graph paper)

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During Class...

1. Stop and listen when the teacher's hand is raised.
2. Completely stop amMMCoqere_ ComComç



3. Take turns speaking one at a time.
4. Speak only about the lesson at hand.
5. Talk only to your assigned partner or group members.

RESPONSIBILITIES

The Students:

1. To be on time and prepared to work
2. To display a positive attitude
3. To put forth best effort daily
4. To be respectful to others

The Teacher:

1. To teach
2. To motivate
3. To maintain order in the class
4. To be fair

RESULTS AND REWARDS



Your success as a student is of utmost importance to me. If you have a disability or any other circumstance that may have some impact on your work in this class, and for which you may require special accommodations, please contact me early in the semester in order that accommodation may be made in a timely manner.

By signing below, the parent(s)/guardian(s) and student(s) state that they have read and understood the syllabus and requirements for class. Please sign and return.

(This syllabus should be kept in the student's notebook as a reference.)
