Blair School *An International Baccalaureate World School*

Integrated Math II

Course Syllabus

2018-2019

Course Description

The focus of the Mathematics II course is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics I. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. The instructional time in Integrated Math 2 is focused on five critical areas: (1) extend the laws of exponents to rational exponents; (2) compare key characteristics of quadratic functions with those of linear and exponential functions; (3) create and solve equations and inequalities involving linear, exponential, and quadratic expressions; (4) extend work with probability; and (5) establish criteria for similarity of triangles based on dilations and proportional reasoning.

Textbook: Dengler, David, Finocchi, Sandy (2018). Carnegie Learning Integrated Math II. Pittsburgh, PA: Carnegie Learning, Inc.

First Semester

Unit 1: Geometric Figures and Proof

Reasoning with Shapes

Topic 1 – Composing and Decomposing Shapes
Topic 2 – Justifying Line & Angle Relationships
Topic 3 – Using Congruence Theorem

Unit 2: Similarity, Quadrilaterals and Right Triangle Trigonometry and Circles

Investigating Proportionality

Topic 1 – Similarity
Topic 2 – Trigonometry
Topic 3 – Circles and Volume

Unit 3: Functions (Part 1)

Exploring Functions

Topic 1 – Functions Derived from Linear Equations
Topic 2 – Exponentials

Second Semester

Unit 3: Functions (Part 2)

Exploring Functions

Topic 3 – Introduction to Quadratics

Unit 4: Quadratics

Seeing Structure

Topic 1 – Solving Quadratic Equations
Topic 2 – Applications of Quadratic Equations
Topic 3 – Circles on a Coordinate Plane

Unit 5: Applications of Probability

Making Informed Decisions

Topic 1 – Independence and Conditional Probability
Topic 2 – Computing Probabilities

Grading Policy

Homework ----------10%
Classwork/Journal -----10%
Quizzes ----------40%
Tests and Projects ------40%

Grading Scale

95 – 100%	A	88 – 89%	B+	78 – 79%	C+	60 – 69%	D
90 – 94%	A-	85 – 87%	B	75 – 77%	C	0 – 59%	F
		80 – 84%	B-	70 – 74%	C-		

Materials

Students need to bring the following materials to class **everyday**.

1. Papers, eraser, and pencils
2. One spiral notebook (about 100 pages)
3. Student Textbook

Homework Assignments
Homework is assigned daily and checked the next day**.** All assignments and notes should be organized in one notebook. Students are responsible to make the necessary corrections in class. **Homework quizzes** are given weekly to encourage students to complete and correct their homework daily. Homework will be collected weekly alongside the homework Quiz.

Late Work
Late work can be accepted. Students have until the Unit Test to turn in work for partial credit. For full credit assignments must be turned in by due date.

Classwork
Do Now: Warm-up questions given at the very beginning of class. They should take about 5 minutes to complete.

Notes: Students are expected to take notes during the lesson. Students are recommended to use a spiral notebook to organize their notes. Notes are collected and graded at the end of every unit.

Practice Exercises: After a lesson, students are given practice problems to work on in class. Students can work independently or with a partner to complete the task.

Exit Ticket: In order to check for understanding of a lesson, one or two problems are sometimes given toward the end of class for students to work on independently.

Tutoring Hours
Tutoring is available Wednesdays from 3:00 – 4:00 pm. Students can also make up any quizzes or tests at the above mentioned time and place.

Attendance and Tardy Policy
When a student is absent, it is his/her responsibility to make up all the missing assignments. Detention will be assigned for habitual tardiness. Students who are tardy for three or more times will be given a "U" as a citizenship grade.

Classroom Rules
In order to promote a safe and nurturing environment for learning, there are certain rules that all students must abide to in the classroom. The following are my classroom rules:

Rules
1. Follow directions
2. Keep hands, feet and objects to self.
3. Use appropriate school language
4. Come to class on time and be in assigned seat when the bell rings.

Corrective Action: If a student chooses to break a rule, the following steps will be taken, in the order they appear:
First time a student breaks a rule: Verbal reminder.
2nd : Change seat (for one day).
3rd : Lunch or after school detention.
4th : Contact home.
5th : Referral to dean's office.
SEVERE disruption: Immediate referral to dean's office.

Sincerely,

Ms. Nava
Mathematics Teacher
Pasadena Unified School District