# Integrated 2 Mathematics Course Syllabus Harbor High School (2019-20)



## Teacher: **Beto Byram** Email: <u>robertbyram@sccs.net</u>

Room: M103 Website: https://www.harbormath2.weebly.com

## Course Goals:

Students will use problem-solving and questioning strategies, investigate concepts using critical and analytical thinking, gather and construct evidence, and communicate rigorous verbal and written arguments to justify their thinking.

### Key Concepts in Integrated 2 Mathematics:

- Geometric transformations (reflection, rotation, translation, and dilation) and symmetry
- Relationships between figures (such as similarity and congruence) in terms of rigid motions and similarity transformations
- Properties of plane figures and measurements of plane figures (such as area, perimeter, and angle measure)
- Proofs of geometric theorems (investigate patterns to make conjectures and formally prove them)
- Modeling with geometry
- Theorems about circles, including arc lengths and areas of sectors
- Measurements of three-dimensional solids (such as volume and surface area)
- Tools for analyzing and measuring right triangles, general triangles, and complex shapes (such as the Pythagorean Theorem and trigonometric ratios)
- Probability (independence and conditional probability, compound events, expected value, and permutations and combinations)
- Investigation of a variety of functions including quadratic, square root, cube root, absolute value, and simple inverse functions
- Representations of quadratic functions with graphs, tables, and equations in real-life contexts
- Solve quadratic equations using a variety of methods such as the zero product property, completing the square, and the quadratic formula
- Symbolic manipulation of expressions in order to solve problems, such as factoring, distributing, multiplying polynomials, and expanding exponential expressions
- Using algebra to write and solve equations arising from geometric situations

## Course Text:

• College Preparatory Math (CPM), *Core Connections Integrated 2*, aligned with the National Common Core Standards in Mathematics. Students will check out a textbook from the library and have access to an online textbook, which includes helpful resources for homework at: <u>https://ebooks.cpm.org/</u>, click on "ENROLL," and use enrollment pin: **9TUAF** 

#### Course Materials:

(Please tell me if you have trouble obtaining these materials for any reason.)

- One binder for Math -OR- a separate Math tab in a large, multi-subject binder
- Five dividers
- Three hole-punched graph paper (One packet for the year is fine.)
- Two Pencils with erasers (All assignments and tests will be completed in pencil.)
- Two Pens

#### **Behavioral Expectations:** (In addition to these, all Student Handbook conduct policies apply.)

- Be respectful of yourself, classmates, teachers, all living things, and property.
- Be honest and responsible for your actions and words.
- Be prepared with materials and assignments.
- Be on time.
- Be determined to learn collaboratively.
- Be engaged.
  - <u>Cell phones (and earbuds) are not allowed</u> in class and must be silent and stowed at all times.
  - There is no eating or chewing gum allowed during class, and the only beverage students may drink is water.

#### Homework & Classwork:

- Homework is regularly assigned and is expected to be completed in pencil by the due date. Homework will be corrected at the beginning of each class period and stamped by the teacher if it is on time and complete. Having the work completed on time is the only way a student can receive full credit for an assignment.
- Each homework assignment will be scored based on completion, accuracy, and neatness after corrections in pen are made. This is to honor the process of learning.
- Students may receive partial credit for assignments submitted late. However, all homework and classwork assignments have a hard deadline of the day the chapter test that corresponds to the assignment is taken. Once the chapter test is taken, assignments from that chapter will no longer be accepted.
- Classwork will be completed collaboratively during class. If it is not finished during class, it becomes individual homework due the next class period.
- Homework assignments, classwork, and important information, including notes and resources will be posted in advance on the class website, https://www.harbormath2.weebly.com.

#### Absences:

- When absent, students are expected to proactively get the assignments from the class website and check in with the teacher or classmates to ensure that all missing work is completed. It is the student's responsibility to schedule a time with the teacher to make up any quizzes or tests and/or to turn in all absent or late work.
- If the absence is excused, a student's work will be accepted without penalty for as many days as the student was absent. If the student's absence was unexcused, no assignments from the day of absence will be accepted.

#### Academic Honesty:

• Copying someone else's work, including online sources, is unacceptable; both "borrower" and "lender" will receive zero credit. In addition, school administrators will be notified and parents/guardians contacted.

#### Tardies:

- Students must be in their assigned seats, quiet and ready to work by the time the bell rings, or they will be considered tardy.
- If students are late to class, they must enter quietly, take a seat, and begin working. The teacher may not acknowledge the student's late entrance, but the student will be marked tardy.
- All school policies for lateness apply.

### Grades:

- Grades are regularly updated and accessible to students and parents on *Illuminate*. If the assignment has no mark, it hasn't yet been graded or entered by the teacher. If the assignment has an "M," it was graded and entered by the teacher, but the student's assignment is missing.
- If there is an error or question about grading, please see the teacher ASAP with the work in question!
- Grades will be based on performance on tests, quizzes, projects, and assignments, and emphasis is placed on students showing growth and mastery of key concepts over the course of the school year. Semester grades are calculated as follows:
  - Individual Tests 50%
  - Individual Quizzes 10%
  - Team Quests 10%
  - Classwork 15%
  - Homework 15%

#### Communication, Office Hours, & Student Support:

Students are encouraged to ask for teacher help or to ask for more challenging material. Students are always welcome to email or come by the classroom by appointment or at available times before school, after school, or during lunch, which will be written on the board each week. Don't forget to take advantage of the After-School Learning Center! There are Math tutors and teachers available and eager to help Tuesday through Friday from 2:45-4:30 in the Library. If you are having trouble, there is a lot of support available to you, such as cpm.org and khanacademy.org; just ask!

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#### Syllabus Acknowledgement

I have read the information contained in the Integrated 2 Mathematics Course Syllabus, and I fully understand class expectations.

Student Name (print):	Class Period:
Student Signature:	
Parent / Guardian Signature(s):	
Parent / Guardian Signature(s):	