

**Mr. Michael H. Hisel - Integrated Mathematics 2 - Fall 2015, Room 317**

**Email: [mhisel@apexacademyhs.info](mailto:mhisel@apexacademyhs.info) - Conference Period 5**

**Course Description:** The focus of Mathematics II is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics I as organized into 6 critical areas, or units. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, round out the course. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

This is the second of a 3-course sequence. Topics include probability, statistics, geometric figures, congruencies, similarities, and coordinate geometry.

**Course Objectives:** The purpose of this syllabus is to guide the participant in the requirements, demands, logistics and expectations of this course.

**Required Materials:** An active email account, one notebook; and pencils (all work and notes) and pens (blue or black to shade graphs)

**Required Textbook:** Pearson Integrated Math 2: volumes 1 & 2 (text will be provided) bring to class daily.

**Grading:** All assignments and projects will be graded according to a rubric as follows:

5 – Advanced *passing*  
4 – Proficient  
3 – Bridging *scores*

2 - Capable *automatic*  
1 - Emerging  
0 – No Evidence *redo*

**Student Expectations:**

The student will:

1. Utilize the key mathematical processes of communicating, reasoning, solving problem, and making connections.
2. Demonstrate an understanding of data analysis.
3. Justify geometric conjectures with informal, but valid arguments.
4. Make judgments under conditions of uncertainty.
5. Solve problems using geometry, transformations, and symmetries

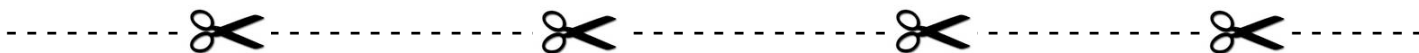
**Classroom Expectations:** All students shall have an equal opportunity to learn, answer questions, seek additional help, and progress regardless of gender, race, and religion. Students will be encouraged to find, explain, and share creative solutions. ANY form of cheating will result in a zero and further consequences if necessary. Cheating includes: plagiarism, copying someone else's work or allowing someone to copy your work.

All students shall:

- a) Respect yourself, others and school property
- b) Follow directions the first time
- c) Come prepared for class
- d) Eat food during lunch
- e) Positively contribute to the learning environment each day
- f) Transition quickly and quietly

*The goal in this class is for everyone to be successful. Therefore, it is necessary for all students to put forth their very best effort and exhibit a high level of respect and self-discipline in class everyday. This will promote and foster a positive place where all students can work to their fullest potential.*

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**Student Acknowledgement Form**

By signing this form, both parent and student acknowledge that they have read and reviewed this syllabus. Mr. Hisel will be available after school, by telephone and via email to answer any questions regarding the items contained in the syllabus.

Student name (print): \_\_\_\_\_ Date: \_\_\_\_\_

Student signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent name (print): \_\_\_\_\_ Date: \_\_\_\_\_

Parent signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent contact information:

Phone: \_\_\_\_\_ and/or Email: \_\_\_\_\_