

# Accelerated Integrated Math 2/3 Honors (AIM2/3H)

## Torrey Pines High School

### Course Description

AIM2/3H is an accelerated honors course that will advance students interested in STEM studies to calculus-based math courses in one academic year. AIM2/3H is designed to challenge students who relish rigorous investigation and intense application of mathematical theory. This course seeks to continue the establishment of a strong mathematical foundation for learning by strengthening and connecting a broad base of mathematical concepts, delving into mathematically challenging problems, and developing computational, procedural, reasoning, and problem-solving skills.

This course requires students to enroll in two separate periods for math in order to cover all IM2H and IM3H standards and topics in one academic year. Students will receive two years of math credit after completing IM2H in the first semester and IM3H in the second semester. The IM3H semester grades will be weighted. Students will meet daily for math instruction that will cover multiple topics with little review. Students can expect daily homework and an exam approximately every two weeks. Interested students should consult with their current IM1H teacher or the department chair at TPHS prior to enrolling.

AIM2/3H students should be able to *independently* demonstrate the ability to:

- Grasp mathematical concepts and strategies quickly and with good retention
- Extend and apply concepts to new situations
- Solve problems with multiple and alternative strategies
- Think logically and symbolically about quantitative, special, and abstract relationships
- Persist in their search for solutions to complex, messy or ill-defined tasks
- Transition easily between topics and maintain focus on learning experiences without prompting
- Use math with self-assurance
- Work, communicate, and justify mathematical concepts in creative and intuitive ways

### Course Content

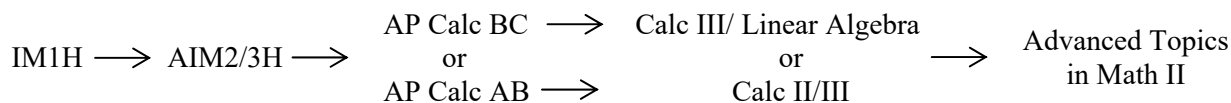
#### *Integrated Math 2 Honors Topics*

Quadratic Equations and Functions  
Functions, Features, and Inverses  
Logarithmic Functions  
Geometric Figures and Proofs  
Similarity and Right Triangle Trigonometry  
Circles Geometric Perspective  
Circles, Other Conics, and Unit Circle  
Probability

#### *Integrated Math 3 Honors Topics*

Polynomial Functions  
Rational Functions  
Modeling with Geometry and Law of Sines and Cosines  
Trigonometric Functions  
Modeling with Functions  
Polar and Parametric Functions  
Statistics  
Limits and Introduction to Derivatives

### Sample Course Sequencing



\*AP Statistics may be taken concurrently with any other math course following IM3H