



Course Description: Integrated Math 1 Honors

Integrated Math 1 Honors is a challenging course designed for students who excel in math. Students in this course easily grasp higher-level concepts and embrace a rigorous curriculum. Integrated Math 1 Honors is the first course of an accelerated three-year integrated math sequence that also includes Pre-Calculus. This course is a college prep course that meets the minimum graduation requirement for the state of California and follows the Integrated Pathway in the Common Core State Standards. Integrated Math 1 Honors will explore in greater depth and rigor the standards of Integrated Math 1 as well as additional Integrated Math 2 and Pre-Calculus topics. Students will extend their understanding of numerical manipulation to algebraic manipulation; synthesize understanding of function; deepen and extend understanding of linear and exponential relationships and systems of linear equations; explore arithmetic and geometric sequences; apply linear models to data that exhibit a linear trend; establish criteria for congruence based on rigid motions; apply the Pythagorean Theorem to the coordinate plane; represent and model with vectors and perform operations on vectors; perform operations on 2×2 and 3×3 matrices, matrix arithmetic, finding inverse matrices, and use matrices in applications. Students will also begin working with quadratic functions, quadratic equations and rational exponents. Students will be expected to work collaboratively, individually and demonstrate their learning through the Standards of Mathematical Practice. Students will be exposed to rich instruction that develops their conceptual understanding, procedural skill, problem-solving skills, critical thinking abilities, and strengthen situational analysis abilities.

Unit list:

- Unit 1: Matrix Madness
- Unit 2: Systems of Equations and Inequalities
- Unit 3: Sequences and Series
- Unit 4: Linear and Exponential Functions
- Unit 5: Features of Functions
- Unit 6: Transformations, Congruence, and Constructions
- Unit 7: Connecting Algebra and Geometry
- Unit 8: Modeling Data
- Unit 9: Quadratic Functions
- Unit 10: Structures of Expressions
- Unit 11: Exponents

Textbook:

Mathematics Vision Project (MVP) *Integrated Math 1 Honors* Modules, San Dieguito Union High School District Custom Edition, 2021.

Prerequisite:

Integrated Math B Honors or Integrated Math B + Summer Bridge

High Bluff Academy is accredited by the Western Association of Schools and Colleges (WASC). The above course is approved by the University of California system (A-G) and the National Collegiate Athletic Association (NCAA).