AMESBURY INNOVATION HIGH SCHOOL
Est. 2015

Course Syllabus: Integrated Mathematics 3

CONTACT INFO

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COURSE OVERVIEW

The Integrated Mathematics 3 course is designed to advance student abilities as they plan for life after high school. Focus is equal between preparing students who are college bound as well as those looking to immediately apply their skills in the workforce. Practical application is an essential component. This course integrates the topics covered in more traditional algebra and geometry courses with statistics, probability, number sense.

COURSE EXPECTATIONS

Students will move at a moderate pace through topics while ensuring their ability to fully grasp each topic before moving on to the next. Students will be expected to take notes and participate in step-by-step examples with the entire class. They will also be expected to work on individual assignments in class and for homework. In addition to individual assignments students will often work cooperatively on hands-on activities.

GRADING POLICY

Students will have many opportunities to demonstrate their learning. Their grades will be determined based on the following criteria:

Classroom participation - 35%
Classwork assignments - 40%
Assessments - 25%

RETAKE/MAKE UP/LATE WORK POLICY

It is my expectation that all students will attend all classes, meetings and all assignments will be completed to meet the deadline posted in Google classroom. Assignments will be accepted for full credit within a week of the assigned date. After that, points will be deducted based on how late the assignment is turned in. At a minimum 50% credit will be earned. If a student misses a class or can't make a deadline it will be his or her responsibility to contact me and make arrangements to make up work and discuss deadlines. I can be accommodating but if missed classes and deadlines become habitual we will discuss during our 1-on-1 meeting and grades will be impacted.

Units taught:

Unit One Review of Geometry
- -Angles and Congruence
- -Angle Relationships
- -Parallel Lines and Transversals
- -Angles of Triangles
- -Congruent Triangles
- -Right Triangles

Unit Two Relationships in Triangles
- -Perpendicular Bisectors
- -Angle Bisectors
- -Medians and Altitudes
- -Inequalities in Triangles

Unit Three Quadrilaterals
- -Angles of Polygons
- -Parallelograms
- -Rectangles
- -Rhombi and Squares
- -Trapezoids and Kites

Unit Four Right Triangles and Trigonometry
- -Geometric Mean
- -Pythagorean Theorem
- -Special Right Triangles
- -Trigonometry
- -Applying Trigonometry

Unit Five Circles
- -Circumference
- -Measuring Arcs and Angles
- -Arcs and Chords
- -Tangents
- -Secants

Unit Six Measurement
- -Area
- -Surface Area
- -Volume

Unit Seven Probability
- -Sample Spaces
- -Probability and Counting
- -Geometric Probability
- -Permutations and Combinations
- -Multiplication and Addition Rules
- -Conditional Probability

Mediating Strategies:

- Cooperative Learning
- Imaged Vocabulary
- Graphic Organizers
- Manipulatives
- Mirrored Problem Solving
- Multiple Modalities
- Interactive Digital Curriculum

Assessment Strategies:

- Guided Practice Exercises
- Pre and Post Tests
- Independent Practice
- Exit Tickets
- Peer and Teacher Review
- Applications and Problem Solving
- Mixed Review
- Unit Test/Quizzes