

Autrey Mill Middle School



Course Syllabus for: Math 8th Grade Advanced Math

Teacher Names	Email Address	Scheduled Help Session/Office Hours
Rania Atef	atefr@fultonschools.org	Wednesday 8:00 AM
Dalton Daniel	danieldg@fultonschools.org	Thursday PM 4:15-4:45 (By appt only/email teacher)
Marian Edmonds	Edmondsm1@fultonschools.org	
Brooke Suma	sumabl@fultonschools.org	

Grading Summary

Major Grades (i.e. Tests and Projects)	50%
Minor Grades (i.e. Quizzes)	40%
Practice (Classwork and Homework)	10%

Recovery on assignments/assessments

- Students who score below a 75% on any MAJOR assessment will have 1 opportunity to retake the assessment.
- Students are eligible to earn a replacement grade on a retake of no higher than 75. (Highest grade put in gradebook)
- Student retakes must be completed before the next major assessment is given.
- It is strongly advised that students seek out help from their teacher either by attending help sessions or watching videos in the 8A hub. Completing any missing assignments (or extra practice problems) will also help retake performance.

Late Work

Students are expected to turn all work on time.

- A code of M (missing) will be entered in the electronic grade book until the assignment is received by the teacher. A 0 will be entered if assignment is not turned in.
- 10 points will be deducted per day for every day late (up to 25 points). (For Classwork and Projects)

Homework Grade

Homework is graded daily for completion (showing work, attempting all problems, best effort). Students will receive one weekly grade for homework

Course Description

- The 6-8 standards are organized using domains, overarching ideas that connect topics across the grades, clusters that illustrate progression of increasing complexity from grade to grade, and standards which define what students should know and be able to do at each grade level. These standards include skills and knowledge – what students need to know and be able to do, as well as mathematical practices – habits of mind that students should develop to foster mathematical understanding and expertise.
- The 6-8 standards are organized in the following domains: ratios and proportional relationships, the number system, expressions and equations, functions, geometry, and statistics and probability.
- In Grade 8, instructional time should focus on three critical areas:
 - 1) Formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations.
 - 2) Grasping the concept of a function and using functions to describe quantitative relationships.
 - 3) Analyzing two and three dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

Textbook and resources

- All students will create interactive notebooks to use as a reference tool.
- As another reference, students can access “Grade 8 Glencoe Georgia Math Volumes 1 and 2 – McGraw Hill Education” online via Classlink

Course Outline:

Unit 1: Transformations, Congruence and Similarity

Unit 2: Exponents and Equations

Unit 3: Geometric Applications of Exponents

Unit 4: Functions

Unit 5: Linear Functions

Unit 6: Linear Models and Tables

Unit 7: Solving Systems of Equations

All units include the Standards for Mathematical Practices:

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning