FRAMEWORK FOR MIDDLE SCHOOL Advanced Courses 2018-2019

(CCRPI: HIGH SCHOOL CREDIT IN MIDDLE SCHOOL)



MUSCOGEE COUNTY SCHOOL DISTRICT

PreK – 12

CURRICULUM & INSTRUCTION DEPARTMENT



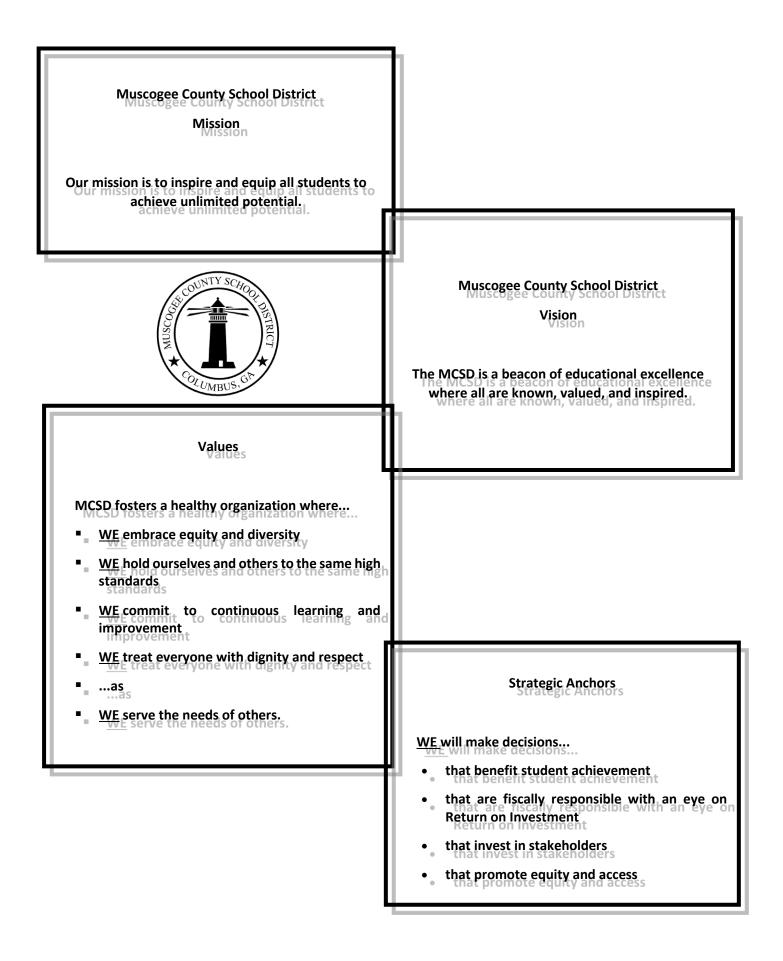




TABLE OF CONTENTS

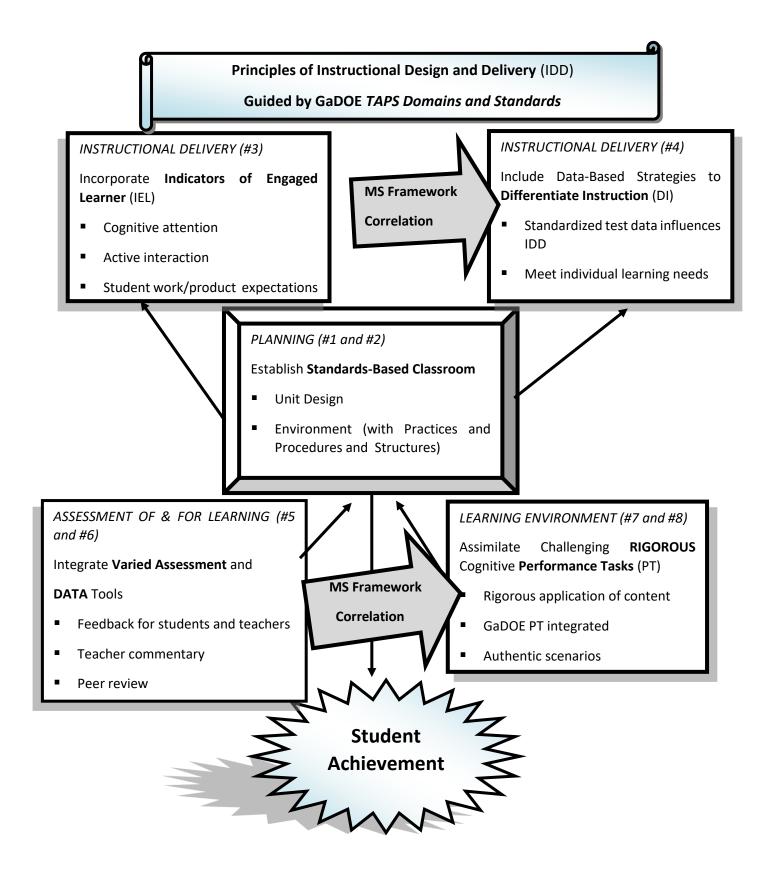
Instructional Long Range Plan and Correlations to Grades 6-8 Mathematics Framework	1
Middle School Mathematics	2
Middle School Mathematics Course Offerings	3
Middle School Mathematics Course Numbers	4
On-Grade-Level Mathematics Course Descriptions	5
Advanced Middle School Mathematics Course Options	6
Advanced Mathematics Course Description	6
Advanced/Gifted Mathematics Course Description	7
Honors Compacted Middle School Mathematics Overview	9
Mathematics Sequence Options for Grades 6 - 12	
Honors Accelerated MATHEMATICS (COMPACTED) 6/7 AND 7/8 Course Descriptions	
Requirements for Participation in COMPACTED Courses by Grade Level	
Sixth Grade Students	
Seventh Grade Students	
Eighth Grade Students	
High School Mathematics Course Descriptions	
High School Mathematics Accelerated Course Descriptions	
ENTRANCE LEVELS for COMPACTED Course Options Chart	
Entrance Level for TEST-OUT Options	
Accelerated Mathematics Options Vertical Organization Chart	
Placement Criteria for Sixth Grade	
Placement Criteria for Seventh Grade	21
Placement Criteria for Eighth Grade	
Suggested Guidelines for 9th Grade Mathematics Course Recommendations:	
GMAS Schedule for Compacted Mathematics	24
High School Course Credit:	24
Identification of Students High School Credit for GSE Algebra I or Accelerated GSE Algebra1/	Geometry A26
STUDENT PLAN: Advanced Mathematics Options for Grades 6-12	27
Middle School Science	
Georgia and Muscogee County School District	
Graduation Requirements	
High School Course Credit (Science):	
Assessment Requirements:	



STUDENT PLAN	31
Advanced Science Options for Grades 6-12	
High School Science Course Descriptions	
Middle School Spanish	
SPANISH SEQENCE OPTIONS FOR GRADES 6-12	
RESOURCES	
Checklist for Documentation	
Parent Letter	
Muscogee County School District Advanced Level Courses Parent Notification & Permission Form	40
Advanced Course Selection and Contract	41



Instructional Long Range Plan and Correlations to Grades 6-8 Mathematics Framework





MIDDLE SCHOOL MATHEMATICS







Middle School Mathematics Course Offerings

Guided by the Muscogee County School District (MCSD) Vision Statement, the Division of Teaching and Learning seeks to provide learning environments which support and challenge the District's mathematics students. Providing learning environments required to meet the varied needs of all mathematics students is a priority of the District. Unique courses are designed to assist struggling students and provide challenges for the talented and gifted mathematics students. Specific middle school mathematics courses are created and offered for talented students in grades six through eight. These courses provide the foundation for more advanced courses in grades nine through twelve.

The *MCSD Middle School Framework* is designed to provide course descriptions and guidelines which include student criteria which must be met for enrollment into each of the specific courses. The course descriptions address the scope of needs from struggling students to the most talented.

- Course Placement Criteria Guidelines assist in the identification of the advanced middle school talented/gifted mathematics students. As middle school students select appropriate advanced mathematics courses for grades six through eight, future high school courses should be considered.
- The Student Plan for Advanced Mathematics in Grades 6-12 (Student Plan) guides the selection of mathematics courses and includes the full scope of mathematics courses from grades six through twelve. The Student Plan is reviewed by students, teachers and parents and kept on file at the middle school.

Middle School Recommendation Forms are communication tools used between the MCSD middle schools and the PreK-12 Curriculum and Instruction Department. Students enrolled into advanced middle school courses are listed with their specific course names. The Recommendation Forms are due to the subject area content specialist each year by the end of August.



Middle School Mathematics Course Numbers

6th Grade GSE Mathematics Courses

Long Course Title	Short Course Title Course Numb				
GSE Mathematics – Grade 6	Math 6	27.0210066			
Advanced GSE Mathematics 6	Adv Math 6	27.0210067			
* (G) Advanced GSE Mathematics 6	* (G) Adv Math 6	* 27.2210067			
Accelerated GSE Mathematics 6/7A	Honors Math 6-7	27.0210069			
* (G) Accelerated GSE Mathematic 6/7A	* (G) Honors Math 6-7	* 27.2210069			

7th Grade GSE Mathematics Courses

Long Course Title	Short Course Title	Course Number
GSE Mathematics – Grade 7	Math 7	27.0220076
Advanced GSE Mathematics 7	Adv Math 7	27.0220077
* (G) Advanced GSE Mathematics 7	(G) Adv Math 7	* 27.2220077
Accelerated GSE Mathematics 7B/8	Honors Math 7-8	27.0220079
Accelerated GSE Mathematics 7B/8	* (G) Honors Math 7-8	* 27.2220079

8th Grade GSE Mathematics Courses

Long Course Title	Short Course Title Course Numb				
GSE Mathematics – Grade 8	Math 8	27.0230086			
Advanced GSE Mathematics 8	Adv Math 8	27.0230087			
* (G) Advanced GSE Mathematics 8	* (G) Adv Math 8	* 27.2230087			
GSE Algebra I	Algebra I	27.0990086			
* (G) GSE Algebra I	* (G) Algebra I	* 27.2990086			
Accelerated GSE Algebra I/Geometry A	Accel Algebra I/Geo A	27.0994086			
* (G) Accelerated GSE Algebra I/Geometry A	* (G) Accel Algebra I / Geo A	* 27.2994086			

- > Notes specific numbers for classes meeting <u>criteria set by GaDOE for Gifted</u> course identification.
- > The **(G) Mathematics Course** numbers identify the *Gifted* Mathematics Courses. Following the:
 - Advanced Mathematics Course Guidelines,
 - Selected Georgia Department of Education Model for Georgia's Gifted Program, and
 - Necessary components for the Advanced Course to meet the full-time equivalent (FTE) gifted requirements.
- Complete descriptions of each course are included in this document.



On-Grade-Level Mathematics Course Descriptions

On-Grade-Level Mathematics course design meets the mathematics fundamental need of students to learn how to solve problems and the vision correlated to the National Council of Teachers of Mathematics (NCTM). The Georgia Standards of Excellence are designed to provide a comprehensive mathematics experience to better prepare students for whatever career or professional path they may choose.

Course Guidelines:

- Grade-Level Georgia Standards of Excellence (GSE) guide instruction.
- Georgia Department of Education (GaDOE) Frameworks provide curricula for mathematics courses.
- Basic Skills instruction is integrated with concentrations on application of skills.
- Alignment of assessment and accountability moves from algorithmic mathematical skills to application of mathematical concepts.
- Integration of mathematical strands (algebra, geometry, data analysis, numbers and operations, and process standards) into performance tasks allows students to solve real-world problems.
- Authentic Performance Tasks are incorporated into the unit designs to provide the students with opportunities for real-world applications.
- Authentic Tasks are designed for the on-grade-level student by the Georgia Department of Education and Muscogee County School District Educators. Specific GaDOE tasks are identified, by MCSD teachers, as required tasks for middle school mathematics.

Suggested Authentic Tasks for On-Grade-Level Mathematics are located in the Muscogee County School District (MCSD) Curriculum Maps and in the Georgia Curriculum Frameworks.



Advanced Middle School Mathematics Course Options

Advanced Mathematics Course Description

Advanced Mathematics course design meets the needs of the advanced/talented mathematics student. The selection criteria identifies those students that are talented in mathematics, but may not meet the State's identified criteria for gifted identification.

Schools may select to implement Advanced Mathematics where there is a large identified population that meets the course placement identification. If there is a small population of talented mathematics students and a small population of identified gifted students, schools may select to follow the Advanced Mathematics Course Curriculum and combine the talented and gifted students using one of the state approved Gifted Program Models. For Georgia Gifted Program requirements, visit the Georgia Department of Education site, <u>http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Gifted%20Education/Georgia-Gifted-Resource-Manual.pdf</u>

Course Guidelines:

- Grade-Level Georgia Standards of Excellence (GSE) guide instruction.
- Specifically identified Algebra I standards are identified for 8th grade advanced/honors courses. This prepares the talented/gifted student for Algebra I or Accelerated Algebra I/Geometry A.
- Limited Basic Skills instruction is included. Students concentrate on application of skills.
- Alignment of assessment and accountability moves from algorithmic mathematical skills to application of mathematical concepts.
- Integration of mathematical strands (algebra, geometry, data analysis, numbers and operations, and process standards) into performance tasks allows students to solve real-world problems.
- Instruction and learning experiences for Advanced Mathematics are based on specific content and advanced application skills and not simply more work or an accelerated pace.
- Differentiated instruction includes the 21st Century Skills Focus: Interpersonal, Creativity, Accountability and Adaptability are integrated with the GSE.
- Advanced Critical Thinking Skills are the focus of course and unit design.
- Advanced Performance Tasks require students to apply knowledge and use critical thinking skills with little teacher guidance. Depth and rigor guide task-design.

Suggested Authentic Tasks for Advanced Mathematics are located in the Muscogee County School District (MCSD) Curriculum Maps and in the Georgia Curriculum Frameworks.



Advanced/Gifted Mathematics Course Description

Advanced/Gifted Mathematics is designed for the talented/gifted mathematics students of the Muscogee County School District. This course, designed by the Muscogee County School District, may be scheduled to meet the requirements identified by the Georgia State Board of Education Rule 160-4-2-.38 Education Program for Gifted Students. The Advanced Mathematics course curriculum may be applied to the classes scheduled for Advanced Content Class (6-12), Cluster Grouping (K-12), or Collaborative Teaching (6-12).

The Course Guidelines and Advanced/Gifted Mathematics Curricula provide the specific strategies for emphasis on process skills, higher-order thinking skills, and student expectations in the course. The maximum size specified for gifted resource classes in State Board Rule 160-5-1-.08 must be observed. For other specific Georgia Gifted Program requirements, visit the Georgia Department of Education site, <u>http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Gifted%20Education/Georgia-Gifted-Resource-Manual.pdf</u>.

Course Guidelines:

- Grade-Level Georgia Standards of Excellence (GSE) are the foundation for course design.
- Specifically identified Algebra I standards are identified for 8th grade advanced/gifted courses. This prepares the talented/gifted student for Accelerated Algebra I/Geometry A.
- Limited Basic Skills instruction is included. Students concentrate on application of skills.
- Alignment of assessment and accountability moves from algorithmic mathematical skills to application of mathematical concepts.
- Integration of mathematical strands (algebra, geometry, data analysis, numbers and operations, and process standards) into performance tasks allows students to solve real-world problems.
- Instruction and learning experiences for Advanced/Gifted Mathematics are based on specific content and advanced application skills and not simply more work or an accelerated pace.
- Differentiated Instruction for the talented/gifted mathematics student includes a 21st Century Learning Skills Focus. The specific 21st Century Learning Skills Standards included are Self-Direction, Intellectual Curiosity, Accountability and Adaptability, Social Responsibility which are integrated with the GSE.
- Advanced Performance Tasks require students to be independent learners and collaborate with peers. Depth and rigor guide the task-design.
- Advanced Performance Tasks require students to apply knowledge and use critical thinking skills with little teacher guidance. Depth and rigor guide the task-design.
- Authentic Performance Tasks are designed for the advanced student by Muscogee County School District Educators, and are provided by the University of Georgia's InterMath Program, and Harvard's College of Education Balanced Assessment Project.
- Selected Performance Tasks from Algebra I are integrated in the course where there is a correlation to the gradelevel GSE.
- Advanced Critical Thinking Skills, identified by Bloom's Taxonomy, challenge the talented/gifted student.
- Gifted Endorsed Teachers are required to meet the requirements for Georgia's Gifted Program using one of the three (3) approved Georgia Department of Education Models:
 - Advanced Content Class (6-12): Students are homogeneously grouped on the basis of achievement and interest in a specific academic content area. The teacher must have the appropriate content area



certification and the gifted endorsement in order to count the gifted students in the class at the gifted FTE weight.

- Cluster Grouping (K-12): Identified gifted students are placed in a heterogeneous classroom. The classroom teacher must have the gifted endorsement and must document the modifications made for gifted students following the Georgia Department of Education guidelines.
- Collaborative Teaching (6-12): Direct instruction may be provided by the classroom teacher, but there
 must be substantial, regularly scheduled collaborative planning between the content area teacher and
 the gifted specialist.

For the Georgia State Board of Education Rule and Gifted Program Manual, launch <u>http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-</u>Instruction/Documents/Gifted%20Education/Georgia-Gifted-Resource-Manual.pdf

Required contract forms and other forms for documentation of modifications are located in the Gifted Program Manual.

Suggested Authentic Tasks for Advanced Mathematics are located in the Muscogee County School District (MCSD) Curriculum Maps and in the Georgia Curriculum Frameworks.



Honors Compacted Middle School Mathematics Overview

The Muscogee County School District (MCSD) Honors Compacted Middle School Mathematics courses provide extremely gifted/talented middle school mathematics students' pathways to Algebra I or Accelerated Algebra I/Geometry A instruction during the identified students' 8th grade school year. **The MCSD Honors 6/7 Mathematics and the MCSD Honors 7/8 Mathematics courses model the Georgia Department of Education's Option 4, Option 5, and Option 6 to prepare students for enrollment during the 8th grade in the high school GSE Algebra I or Accelerated GSE Algebra I/Geometry A.** Customization of GaDOE Option 4, Option 5, and Option 6 for MCSD addresses the needs of 6th and 7th grade students who are new to the District or who have recently demonstrated extreme talents in mathematics. This coursework is unique to the District and provides the MCSD students identified by specific advanced criteria with an opportunity to prove mastery of content standards and accelerate their mathematics coursework.

All MCSD Advanced Middle School Mathematics Course Options are designed by MCSD middle and high school teachers and are based on the GaDOE GSE Frameworks. This collaboration allows the District to design coursework and pathways to meet the unique needs of our most talented mathematics students. Through the various options, MCSD provides advanced content and emphasis on process skills, and higher-order thinking skills to continue to challenge and encourage the development of our most talented students of mathematics.

The MCSD Mathematics Honors 6/7 and 7/8 Compacted courses are in addition to the MCSD Advanced Middle School Mathematics courses provided by MCSD and **are reserved to serve a unique population of extremely talented middle school mathematics students** as identified by very specific selected data sets listed in the *Placement Criteria Table*.

Students must qualify for the MCSD Honors Compacted 6/7 and 7/8 Mathematics courses through a rigorous MCSD Advanced Middle School Mathematics Identification Process.

- Students eligible for Mathematics Honors 6/7 or 7/8 Compacted courses must meet specific MCSD identified participation criteria.
- Students participating in Honors Compacted 6/7 or 7/8 Mathematics courses must *plan* to enroll in:
 - SSE Algebra I or Accelerated GSE Algebra I/Geometry A in the 8th grade year and,
 - Advanced Placement (AP) Statistics, AP Calculus AB, or AP Calculus BC by the 12th grade.



Mathematics Sequence Options for Grades 6 - 12

	Mathematics Sequence Options for Grades 6 - 12								
GRADE	Option 1	Option 2	Option 3	Option 4	Option 5 Option 6				
				Advanced	Accelerated	Accelerated			
6	Grade 6	Grade 6	Grade 6	Grade 6 Advanced	Grade 6-8 Advanced	Grade 6-8 Advanced			
7	Grade 7	Grade 7	Grade 7	Grade 7 Advanced					
8	Grade 8	Grade 8	Grade 8	Grade 8 Advanced	Coordinate Algebra OR Algebra I	Accelerated Coordinate Algebra/Analytic Geometry A OR Accelerated Algebra I/ Geometry A			
9	Foundations of Algebra	Coordinate Algebra OR Algebra I	Accelerated Coordinate Algebra/Analytic Geometry A OR Accelerated Algebra I/ Geometry A	Accelerated Coordinate Algebra/Analytic Geometry A OR Accelerated Algebra I/ Geometry A	Analytic Geometry OR Geometry	Accelerated Analytic Geometry B/Advanced Algebra OR Accelerated Geometry B/ Algebra II			
10	Coordinate Algebra OR Algebra I	Analytic Geometry OR Geometry	Accelerated Analytic Geometry B/Advanced Algebra OR Accelerated Geometry B/ Algebra II	Accelerated Analytic Geometry B/Advanced Algebra OR Accelerated Geometry B/ Algebra II	Advanced Algebra OR Algebra II	Accelerated Pre-Calculus			
11	Analytic Geometry OR Geometry	Advanced Algebra OR Algebra II	Accelerated Pre-Calculus		Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses			
12	Advanced Algebra OR Algebra II	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses	Fourth Mathematics Course Options*; IB Courses**; Dual Enrollment Courses			

Resource: Georgia Department of Education, <u>http://www.georgiastandards.org</u>

Option 1: This option includes grade-level standards and tasks for middle grade students. Upon entering 9th grade, students with extreme deficiencies and who are eligible may take Foundations of Algebra.

Option 2: This option includes grade-level standards and tasks for middle grade students. After GSE Algebra II students may take GSE Pre-Calculus; AP Statistics; or a fourth year GSE mathematics course related to the student's interest.

Option 3: This option includes grade-level standards and tasks for middle grade students. It is possible for students who successfully complete middle grades standards to take Accelerated Mathematics. After Accelerated GSE Pre-Calculus students may take AP Calculus AB, AP Calculus BC, AP Statistics, a fourth year GSE mathematics course related to the student's interest, or an appropriate post-secondary option.

Option 4: This option includes grade-level standards with enhanced and more complex tasks for middle grades students. After Accelerated GSE Pre-Calculus students may take AP Calculus AB, AP Calculus BC, AP Statistics, a fourth year GSE mathematics course related to the student's interest, or an appropriate post-secondary option.

Option 5: This option <u>requires the compacting of all</u> middle grades mathematics standards into two years. After GSE Pre-Calculus students should be prepared to <u>take AP Calculus AB, AP Statistics</u>, a fourth year GSE mathematics course related to the student's interest, or an appropriate postsecondary option.

Option 6: This option is for a few students who are <u>highly talented in mathematics</u>. It <u>requires the compacting of all</u> middle grades mathematics standards into two years. After Accelerated GSE Pre-Calculus, students may take <u>AP Calculus AB, AP Calculus BC</u>, AP Statistics, a fourth year GSE mathematics course related to the student's interest, or an appropriate post-secondary option such as multivariable calculus.

Framework for Middle School Mathematics, Science, and Spanish.



Honors Accelerated MATHEMATICS (COMPACTED) 6/7 AND 7/8 Course Descriptions

Honors Accelerated Compacted 6/7 and 7/8 Mathematics courses are designed for the talented/gifted mathematics students of the Muscogee County School District. These courses, designed by the Muscogee County School District (MCSD), may be scheduled to meet the requirements as identified for middle school students.

The MCSD Course Guidelines and *Honors Accelerated Compacted 6/7 and 7/8 Mathematics* curricula provide the specific strategies for emphasis on process skills, higher-order thinking skills, and student expectations in each of the courses. *Honors Accelerated Compacted 6/7 Mathematics* leads first to *Honors Accelerated Compacted 7/8 Mathematics* and then to *GSE Algebra I* or *Accelerated GSE Algebra I/Geometry A*.

Course Guidelines:

- Georgia Standards of Excellence (GSE) on Grade-Level, and ABOVE, with the Georgia Department of Education Frameworks are the foundation for course design.
- These courses are designed for students who intend to enroll in AP Calculus.
- Honors Accelerated Compacted 6/7 Mathematics: Sixth grade GSE are combined with specifically identified seventh grade GSE standards to accelerate the pace of standards mastery toward student enrollment in Honors Accelerated Compacted 7/8 Mathematics during the seventh grade and GSE Algebra I or Accelerated GSE Algebra I/Geometry A in the eighth grade.
- Honors Accelerated Compacted 7/8 Mathematics: Selected seventh grade GSE are combined with eighth grade GSE standards to accelerate the pace of standards mastery toward student enrollment in GSE Algebra I or Accelerated GSE Algebra I in the 8th grade.
- Basic Skills instruction is NOT included. Students concentrate on application of skills through performance tasks.
- Alignment of assessment and accountability moves from algorithmic mathematical skills to application of mathematical concepts.
- Integration of mathematical strands (algebra, geometry, data analysis, numbers and operations, and process standards) into performance tasks allows students to solve real-world problems.
- Instruction and learning experiences for *Honors Accelerated Compacted 6/7* and *7/8 Mathematics* are based on specific content and advanced application skills and not simply more work or an accelerated pace.
- Differentiated Instruction for the talented/gifted mathematics student includes a 21st Century Learning Skills Focus. The specific 21st Century Learning Skills Standards included are Self-Direction, Intellectual Curiosity, Accountability and Adaptability, Social Responsibility which are integrated with the GSE.
- Advanced Performance Tasks require students to be independent learners and collaborate with peers. Depth and rigor guide the task-design. Advanced Performance Tasks require students to apply knowledge and use critical thinking skills with little teacher guidance.

Students identified in the 6th grade year, for Accelerated GSE will:

- Receive instruction for identified and compacted 6th and 7th grade GSE during the 6th grade year, and prepare to *earn proficient or distinguished achievement level* on the 6th Grade Georgia Milestones EOG assessment during their 6th grade school year.
- Receive instruction for identified and compacted 7th and 8th grade GSE during the 7th grade year, and prepare to *earn proficient or distinguished achievement level* on the 7th Grade Georgia Milestones EOG assessment during their 7th grade school year.
- Receive instruction for GSE Algebra I or GSE Accelerated Algebra I/Geometry A by a high school mathematics certified teacher during the 8th grade year and, prepare to *earn proficient or distinguished achievement level* on the GSE Algebra I Milestone Test (EOC) during their 8th grade school year.



This option is available for students entering MCSD **after** the 6th grade year or for those students demonstrating talents for advanced mathematics after the 6th grade identification period. Students cannot enter this option after the 7th grade year.

Students identified in the 7th grade year, for the Accelerated GSE will:

- Receive instruction for identified and compacted 7th and 8th grade GSE during the 7th grade year, and prepare to *earn proficient or distinguished achievement level* on the 7th Grade Georgia Milestones EOG assessment during their 7th grade school year.
- Receive instruction for GSE Algebra I or GSE Accelerated Algebra I/Geometry A by a high school mathematics certified teacher during the 8th grade year and, prepare to *earn proficient or distinguished achievement level* on the GSE Algebra I Milestone Test (EOC) during their 8th grade school year.



Requirements for Participation in COMPACTED Courses by Grade Level

Sixth Grade Students

Honors 6/7 Compacted

REQUIRED (4 of 5):

- Previous year Georgia Milestones Assessment (GMAS) Achievement Level of "Distinguished"
- Student Plan for Grades 6-12 Mathematics Coursework completed prior to participation
- Signed Agreement/Contract: Student and Parent
- 90% or better mastery of previous grade-level mathematics GSE as indicated by 5th grade yearly average (report card grade for mathematics)
- Principal's recommendation

Whole Grade Mathematics Acceleration Option

REQUIRED:

- Georgia Milestones Assessment (GMAS) 5th grade Achievement Level of "Distinguished".
- Student Plan for Grades 6-12 Mathematics Coursework completed prior to participation
- Signed Agreement/Contract: Student and Parent
- 90% or better mastery of previous grade-level mathematics GSE as indicated by 5th grade yearly average (report card grade for mathematics) (middle school magnet programs may require higher scores for participation)
- Teacher recommendation
- Principal recommendation

(Students meeting requirements for the 6th grade may be placed in 7th Grade Mathematics or Advanced 7th Grade Math. Students meeting requirements may NOT be placed into the Honors Compacted 7/8 Mathematics course.)



Seventh Grade Students Honors 7/8 Compacted

REQUIRED:

Georgia Milestones Assessment (GMAS) 6th grade score of "Distinguished".

(middle school magnet programs may require higher scores for participation)

- Student Plan for Grades 6-12 Mathematics Coursework completed prior to participation
- Student signed agreement
- Parent signed agreement
- 90% or better mastery of previous grade-level mathematics GSE as indicated by 6th grade yearly average (report card grade for mathematics)
- Teacher recommendation
- Principal recommendation

Whole Grade Mathematics Acceleration Option

REQUIRED:

Georgia Milestones Assessment (GMAS) 6th grade score of "Distinguished".

(middle school magnet programs may require higher scores for participation)

- Student Plan for Grades 6-12 Mathematics Coursework completed prior to participation
- Student signed agreement
- Parent signed agreement
- 90% or better mastery of previous grade-level mathematics GSE as indicated by 6th grade yearly average (report card grade for mathematics)
- Teacher recommendation
- Principal recommendation

(Students meeting requirements for the 7th grade may be placed in 8th Grade Mathematics or Advanced 8th Grade Mathematics. Students meeting requirements may NOT be placed into the high school Mathematics courses.)



Eighth Grade Students

Honors Compacted

- Students entering the 8th Grade <u>cannot</u> be identified to <u>begin</u> an Honors compacted course.
- Honors Compacted middle school mathematics courses are only available for 6th and 7th grade students.

Whole Grade Mathematics Acceleration Option (of 8th grade mathematics standards)

REQUIRED:

Georgia Milestones Assessment (GMAS) 7th grade score of "Distinguished".

(middle school magnet programs may require higher scores for participation)

- Student Plan for Grades 6-12 Mathematics Coursework completed prior to participation
- Student signed agreement
- Parent signed agreement
- 90% or better mastery of previous grade-level mathematics GSE as indicated by 7th grade yearly average
- Teacher recommendation
- Principal recommendation
- Middle School teachers and principals collaborate with the selected high school's teachers and principal to select the appropriate course, GSE Algebra I or Accelerated GSE Algebra I/Geometry A.

Both Options: Honors compacted courses and Whole Grade Mathematics Acceleration Options require students to be identified by the *MCSD* selected data sets. *The Advanced Middle School Honors COMPACTED and Whole Grade Mathematics Acceleration Options* prepare students for GSE Algebra I or Accelerated GSE Algebra I/Geometry A instruction by a high school certified mathematics teacher during the 8th grade school year. A student may not be placed into the high school course in middle school without showing mastery of 8th grade standards – either through "testing out" or completing a course that includes Grade 8 GSE for mathematics.



High School Mathematics Course Descriptions

(The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, logical subject that makes use of their ability to make sense of problem situations.)

GSE Foundations of Algebra:

A first-year high school mathematics course option for students who have **completed** mathematics in grades 6 - 8 yet will need substantial support to bolster success in high school mathematics. The course is aimed at students who have reported low standardized test performance in prior grades and/or have demonstrated significant difficulties in previous mathematics classes. There are specific eligibility requirements for enrollment in this course. This course is not offered in Middle School.

GSE Algebra I:

The first course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications.

GSE Geometry:

The second course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of geometry with correlated statistics applications.

GSE Algebra II:

The third course in a sequence of three high school courses designed to ensure career and college readiness. It is designed to prepare students for fourth course options relevant to their career pursuits.

GSE Pre-Calculus:

The fourth mathematics course option designed to prepare students for calculus and other college level mathematics courses.



High School Mathematics Accelerated Course Descriptions

Accelerated GSE Algebra 1/Geometry A:

The first course in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school tenure, including Advanced Placement Calculus AB, Advanced Placement BC, and Advanced Placement Statistics.

Accelerated GSE Geometry B / Algebra II:

The second course in a sequence of mathematics courses designed to ensure that students are prepared to take higherlevel mathematics courses during their high school tenure, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

Accelerated GSE Pre-Calculus:

The fourth mathematics option designed to prepare students for calculus and other college level mathematics courses.

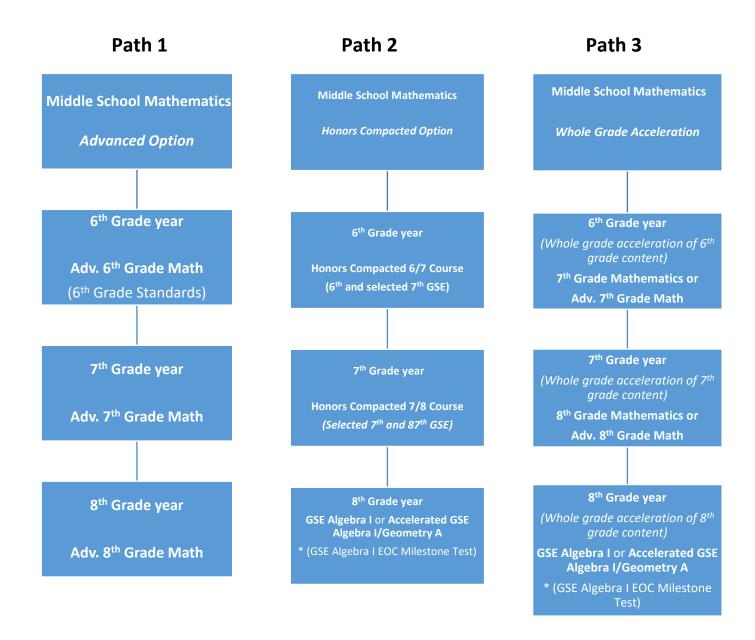
Source: Georgia Department of Education, <u>www.gadoe.org</u>



ENTRANCE LEVELS for CO	MPACTED Course Options Cha	rt	
Entering	6th	7th	8th
Option 4: Compacted GSE	toward GSE Algebra I during 8th gra	de year (mirrors GaDOE Option	5)
6th Grade Year	Honors Compacted		
	6th/7th Grade GSE		
7th Grade Year	Honors Compacted	Honors Compacted	
	7th/8th Grade GSE	7th/8th Grade GSE	
	GSE Algebra I or Accelerated	GSE Algebra I or Accelerated	No compacted 8 th grade
	GSE Algebra I/Geometry A	GSE Algebra I/Geometry A	options-
8th Grade Year	(including the	(including the	See 8 th Grade Options
	GSE Algebra I EOC Milestone Test)	GSE Algebra I EOC Milestone Test)	below -
Entrance Level for TES			
Entering	6th	7th	8th
	Option Out of 6th GSE and into		
6th Grade Year	7th Grade Math or		
	Adv. 7 th Grade Math		
		Option Out of 7th Grade GSE and into	
7th Grade Year	8th Grade GSE	8th Grade Math or	
		Advanced 8 th Grade Math	
			Option Out of 8th Grade
	GSE Algebra I or Accelerated	GSE Algebra I or Accelerated	GSE and into GSE Algebra I or
	GSE Algebra I/Geometry A	GSE Algebra I/Geometry A	Accelerated GSE Algebra
8th Grade Year	(including the	(including the	I/Geometry A
	GSE Algebra I EOC Milestone Test)	GSE Algebra I EOC Milestone Test)	(including the



Accelerated Mathematics Options Vertical Organization Chart



* Be sure to use the **Course Criteria** and **The Student Plan** to assist in the decision between GSE Algebra I or Accelerated GSE Algebra I/Geometry A. The scope of all mathematics courses in grades six through twelve should be considered in this decision.



Placement Criteria for Sixth Grade

	Sixth Grade Mathematics Courses		Placement Criteria Guidelines
	MCSD Middle School Courses		Meets 3 of 4
6 th	Grade Mathematics (on-grade-level)		Previous year GMAS Achievement Level:
	GSE Standards: 6 th Grade		Proficient, Developing, and Beginning
	On-grade-level Performance Tasks		Yearly Math Average: 84 and below
	Critical Thinking Skills		Teacher Recommendation
			Student Plan of Coursework
Ad	vanced 6 th Grade Mathematics		Previous year GMAS Achievement Level:
	GSE Standards: 6 th Grade		Proficient and Distinguished
	Limited Basic Skills		Yearly Math Average: 85-90
	Advanced Performance Tasks		Teacher Recommendation
	Advanced Critical Thinking Skills		Student Plan of Coursework
	Differentiation – 21 st Century Skills Focus: Interpersonal, Creativity,		
	Accountability and Adaptability		
٨d	/anced/Gifted 6 th Grade Mathematics (Gifted Guidelines)		Previous year GMAS Achievement Level:
	Advanced 6 th Grade Mathematics plus	_	Proficient and Distinguished
	Students must be gifted identified by the GaDOE requirements		Yearly Math Average: 85-90
	GSE Standards: 6 th Grade		Teacher Recommendation
	Focus on Process Standards and Advanced Critical Thinking Skills		Student Plan of Coursework
	Gifted Endorsed, High-Quality Mathematics Teacher		
MC	SD Middle School ACCELERATED Course Offerings		Meets 4 of 5
Ma	thematics: Honors Compacted 6/7		QUIRED
	GSE Standards: 6 th Grade and Selected 7 th Grade		Previous year GMAS Achievement Level:
	Limited Basic Skills Instruction	_	Distinguished
	Advanced Performance Tasks		Student Plan of Coursework
	Advanced Critical Thinking Skills		Signed Agreement: Student and Parent
	Differentiation – 21 st Century Skills Focus: Interpersonal, Creativity,		Yearly Math Average: 90-100
	Accountability and Adaptability		Principal's recommendation
Wh	ole Grade Mathematics Acceleration Option	REC	QUIRED
	Option out of 6 th		
	Placed into 7 th , Adv. 7 th		Distinguished
			Student Plan of Coursework
			Signed Agreement: Student and Parent
			Yearly Math Average: 90-100
			Principal's recommendation



Placement Criteria for Seventh Grade

	Seventh Grade Mathematics Courses		Placement Criteria Guidelines	
MC	SD Middle School Courses		Meets 3 of 4	
7 th	Grade Mathematics (on-grade-level)		Previous year GMAS Achievement Level:	
	GSE Standards: 7 th Grade		Proficient, Developing, and Beginning	
	On-grade-level Performance Tasks		Yearly Math Average: 84 and below	
	Critical Thinking Skills		Teacher Recommendation	
	Differentiation – 21 st Century Skills Focus: Communication and		Student Plan of Coursework	
	Collaborative Skills			
Ad	vanced 7 th Grade Mathematics		Previous year GMAS Achievement Level:	
	GSE Standards: 7 th Grade		Proficient and Distinguished	
	Limited Basic Skills		Yearly Math Average: 85-90	
	Advanced Performance Tasks		Teacher Recommendation	
	Advanced Critical Thinking Skills		Student Plan of Coursework	
	Differentiation – 21 st Century Skills Focus: Interpersonal, Creativity,			
	Accountability and Adaptability			
Adv	vanced/Gifted 7 th Grade Mathematics		Previous year GMAS Achievement Level:	
	Advanced 7 th Grade Mathematics plus		Proficient and Distinguished	
	Differentiation – 21 st Century Skills Focus: Self-Direction, Intellectual		Yearly Math Average: 85-90	
	Curiosity, Accountability and Adaptability, Social Responsibility,		Teacher Recommendation	
	Communication and Collaboration Skills		Student Plan of Coursework	
	Gifted Endorsed, High-Quality Mathematics Teacher			
	SD Middle School ACCELERATED Course Offerings	Meets 4 of 5		
	thematics: Honors Compacted 7/8		QUIRED	
	GSE Standards: Selected 7 th Grade and 8 th Grade		Previous year GMAS Achievement Level:	
	Limited Basic Skills		Distinguished	
	Advanced Performance Tasks	_	Student Plan of Coursework	
	Advanced Critical Thinking Skills		Signed Agreement: Student and Parent	
	Differentiation – 21 st Century Skills Focus: Interpersonal, Creativity,		Yearly Math Average: 90-100	
	Accountability and Adaptability		Principal's recommendation	
	ole Grade Mathematics Acceleration Option		QUIRED	
	Option Out of 7 th			
	Placed into 8 th , Adv. 8 th		Distinguished	
			Student Plan of Coursework	
			Yearly Math Average: 90-100	
			Principal's recommendation	



Placement Criteria for Eighth Grade

	Eighth Grade Mathematics Courses Placement Criteria Guidelines						
MC	SD Middle School Courses	Me	ets 3 of 4				
8 th (Grade Mathematics:		Previous year GMAS Achievement Level:				
	GSE Standards: 8 th Grade		Proficient, Developing, and Beginning				
	On-grade-level Performance Tasks		Yearly Math Average: 84 and below				
	Critical Thinking Skills		Teacher Recommendation				
			Student Plan of Coursework				
Adv	anced 8th Grade Mathematics (on-grade-level)		Previous year GMAS Achievement Level:				
	GSE Standards: 8 th Grade		Proficient and Distinguished				
	Advanced Performance Tasks		Yearly Math Average: 85-90				
	Advanced Critical Thinking Skills		Teacher Recommendation				
	Differentiation – 21 st Century Skills		Student Plan of Coursework				
Adv	anced/Gifted 8 th Grade Mathematics		Previous year GMAS Achievement Level:				
	Advanced 8 th grade Mathematics plus		Proficient and Distinguished				
	Differentiation – 21st Century Skills Focus: Self-Direction, Intellectual Curiosity,		Yearly Math Average: 85-90				
	Accountability and Adaptability, Social Responsibility, Communication and		Teacher Recommendation				
	Collaboration Skills		Student Plan of Coursework				
	Gifted Endorsed, High-Quality Mathematics Teacher						
	SD Middle School ACCELERATED Course Offerings		ets 4 of 5				
	Algebra I		QUIRED				
	Algebra (high school level) standards		Previous year GMAS Achievement Level: Distinguished				
	High school level course		Student Plan of Coursework				
	Students are planning for GSE Honors Geometry as a freshman. (Students previously completed 8 th grade GSE course)		Signed Agreement: Student and Parent				
	(Students previously completed 8° grade GSE course)		Yearly Math Average: 90-94				
۸cc	elerated GSE Algebra I/Geometry A	REC	Principal's recommendation QUIRED				
	All high school algebra standards and a portion of the high school geometry		Previous year GMAS Achievement Level:				
	standards	-	Distinguished				
	High school level course		Student Plan of Coursework				
	(Students previously completed 8 th grade GSE)		Signed Agreement: Student and Parent				
			Yearly Math Average: 95-100				
			Principal's recommendation				
MC	SD Middle School ACCELERATED Course Offerings						
	ole Grade Mathematics Acceleration Option	REC	QUIRED				
	Advanced Option Out of 8 th Grade GSE		Previous year GMAS Achievement Level:				
	Placed into GSE Algebra I or Accelerated GSE Algebra I/Geometry A		Distinguished				
			Student Plan of Coursework				
			Signed Agreement: Student and Parent				
			Yearly Math Average: 95-100				
			Principal's recommendation				



Suggested Guidelines for 9th Grade Mathematics Course Recommendations:

Accelerated GSE Algebra I/Geometry A=

- Yearly mathematics average >95 and
- Previous year GMAS Distinguished Learner

GSE Algebra I=

- Yearly mathematics average >78 and
- > Previous year GMAS Proficient and Developing Learners

SUPPORT Class

- Yearly mathematics average <78 and</p>
- Previous year GMAS Beginning Learner

Foundations of Algebra=

- Score at the Beginning Learner level on the 7th grade math Milestones EOG assessment, or
- Score at the Beginning Learner level on the 8th grade Milestones EOG assessment, or
- Failed Algebra I or Coordinate Algebra and scored at the Beginning Level on the EOC assessment at the end of the course.

For students who do not meet the above, but need significant mathematics support, schools have the *option* to enroll up to an additional 3% of first-time 9th graders who did not take a high school math course in middle school. Please ensure that for first-time 9th graders within the 3% that do not meet the initial enrollment criteria, IKAN assessment is administered and scores are documented to justify student placement (score at IKAN Stage 5 (equivalent to 4th grade mathematics) or below.)

While Foundations of Algebra can satisfy one of the four math credits needed for graduation, placement in Foundations of Algebra can significantly limit post-secondary options for students after graduation.



GMAS Schedule for Compacted Mathematics

- * 6th grade students in the Honors Compacted 6/7 Mathematics course will take the 6th grade GMAS
- * 7th grade students in the Honors Compacted 7/8 Mathematics course will take the 7th grade GMAS
- * 8th grade students in the Algebra I or Accelerated Algebra I/Geometry A courses will take the Algebra I GMAS

High School Course Credit:

Unit credit may be awarded for high school courses offered in the middle grades that meet 9-12 GSE mathematics requirements. Credit courses must follow GSE standards requirements as well as any associated End-of-Course-Test requirements.

Unit credit shall be awarded only for courses that include concepts and skills based on the Georgia Standards of Excellence (GSE) <u>for grades 9-12</u> or those approved by the State Board of Education. The Individualized Education Program (IEP) shall specify whether core courses taken as part of an IEP shall receive core unit credit. No high school course credit may be awarded for courses taken in middle school in which instruction is based on the GSE for grades K-8 AND if student does not earn an achievement level of Proficient Learner or Distinguished Learner on the associated Georgia Milestones EOC test while enrolled in grades K-8. Course credit will not be recommended to high schools.

Assessment Requirements:

End-of-Course-Test:

The Georgia Milestones End-of-Course Test (GMAS) is required for the GSE high school courses, where applicable.

MCSD requires that any students enrolled in these courses, during Middle School, to **earn a Proficient Learner or Distinguished Learner achievement level** on the course's associated Georgia Milestones EOC test **to receive high school credit**.



Criteria for Math Placement								
Criteria	4	3	2	1				
Communication	Always uses correct math vocabulary to explain or describe math problems or situations	Usually uses correct math vocabulary to explain or describe math problems or situations	Uses a large mix of correct math vocabulary and "regular" language to explain or describe math problems or situations	Rarely discusses math topics and rarely uses mathematical vocabulary.				
Representation	Is always able to represent math problems using many multiple representations, i.e. symbols, numbers, charts, graphs, tables, pictures, manipulatives and equations.	Is frequently able to represent math problems using multiple representations, i.e. symbols, numbers, charts, graphs, tables, pictures, manipulatives and equations.	Is able to represent math problems in a limited number of ways, usually choosing one single method on a regular basis.	Does not represent problems using any method other than that used by others or the teacher or does not represent problems at all.				
Organization	Always keeps a notebook where notes, homework and returned assignments are kept in an orderly manner. Can always put their finger on any assignment you request.	Is somewhat able to keep a notebook where notes, homework and returned assignments are kept in an orderly manner. Can usually find everything with a few exceptions.	Isn't really able to keep a notebook where notes, homework and returned assignments are kept in an orderly manner but is sometimes able to find work. Is likely to use textbook as storage.	Does not keep track of notes, homework and returned assignments. Frequently is unable to find work.				
Work Habits	Always completes homework/class work on time with average 94% or better. Completes homework accurately all the time. Work is always complete, neat and on time. Always willing to ask questions when needed.	Consistently completes homework/class work on time with an 85-94 average. Completes homework accurately most of the time. Always willing to ask questions when needed.	Usually completes homework/class work on time with an 80-84 average. Sometimes willing to ask questions when needed.	Sometimes completes homework/class work on time with a lower than 80 average. Never willing to ask questions when needed.				
Enjoys Math	Engages w/minimal or little direction from teacher. Seeks and enjoys a challenge and regularly completes classroom tasks in this specific subject area with authentic engagement with minimal or little direction from the teacher. Never complains when given a higher order thinking problem. High internal/low external motivation. Is very confident in math class.	Requires some direction. Enjoys challenge but does not seek. Usually completes tasks by exceeding expectations. Occasionally class work meets expectations; requires some direction from teacher. High internal/medium external motivation. Is sometimes confident in math class.	When directed by teacher, accepts challenge. Completes tasks in a way that meets expectations for the class; when directed by the teacher, the student can produce work that exceeds expectations. Moderate internal/moderate external motivation. Every now and then, shows confidence in math class.	Needs extra teacher direction. Not motivated. Completes tasks in a way that meets expectations for the class; even when directed by the teacher the student produces work that meets minimum expectations. Struggles in higher order thinking problems. Low internal/high external motivation. Rarely exhibits confidence in math class.				



Identification of Students High School Credit for GSE Algebra I or Accelerated GSE Algebra1/Geometry A

- 1. Students identified for the middle school accelerated mathematics courses are to be listed on the provided form and submitted to PreK-12 Curriculum and Instruction Department. The spreadsheet with the student middle school accelerated mathematics course placement is needed by the **end of August.**
- 2. The digital Excel spreadsheet is available through email upon request from the PreK-12 Curriculum and Instruction Department.
- 3. Do **NOT** include students who are placed in Advanced Math courses.

(spreadsheet headings) Muscogee County School District PreK-12 Curriculum and Instruction Department Middle School Mathematics Accelerated Student Identification and High School Credit Documentation Name of School:

Date:

School Year:

Student's	Student's	Student	Grade	Course Name	Final	GMAS	Milestones	Teacher of	Next Course
Last	First	GTID	Level	(8 th Grade	Numerical	Scale	Exam (EOC)	course identified	Recommendations
Name	Name			(8 th Grade Math, Algebra I or Accel Algebra I/Geometry A, Do NOT include <i>Advanced Math</i> Course titles	Course Average	Score	Results	identified in Column E	



STUDENT PLAN: Advanced Mathematics Options for Grades 6-12

- As students enter the advanced middle school mathematics coursework, it is important to understand the complete mathematics course path from the sixth grade through the twelfth.
- > This plan can be modified in the future to meet changing student needs.

Student:				
Middle School:				
Date of Plan Design:				
Grade Level	Course – Check Planned Course Course Course Average			
6	Advanced 6th Grade Mathematics			
(select one)	Honors Compacted 6/7 Mathematics			
(select one)	Advanced 7th Grade Mathematics (test-out Grade 6 Mathematics)			
7	Advanced 7th Grade Mathematics			
(select one)	Honors Compacted 7/8 Mathematics			
(select one)	Advanced 8th Grade Mathematics (test-out Grade 7 Mathematics)			
8	Advanced 8th Grade Mathematics			
(select one)	GSE Algebra I (high school coursework)			
(select one)	Accelerated GSE Algebra I/Geometry A (high school coursework)			
9	GSE Algebra I			
9	GSE Honors Geometry			
(select one)				
	Accelerated GSE Geometry B/Algebra II			
10	GSE Geometry			
10	GSE Honors Algebra II			
(select one)	Accelerated GSE Geometry B/Algebra II			
	Accelerated Pre-Calculus			
	GSE Algebra II			
11	GSE Pre-Calculus			
(select one)	Accelerated Pre-Calculus			
AP Calculus AB				
	AP Calculus BC			
	GSE Pre-Calculus or other 4 th Math Course Option			
12	AP Calculus AB			
(select one) AP Statistics				
(beleet one)	AP Calculus BC			
	Move On When Ready college courses			
Student Signature:	Date:			
Parent/Guardian Sigr	nature: Date:			

STUDENTS ARE EXPECTED TO REMAIN IN THE FIRST SELECTED OPTION 4, 5, or 6 COURSE FOR AT LEAST A YEAR UNLESS REMOVED FOR PERFORMANCE

Complete Plan is kept on file at the MCSD middle school.



MIDDLE SCHOOL SCIENCE





SCIENCE: ADVANCE PLACEMENT GUIDELINES AND OPTIONS

(8th Grade ONLY)

Eighth Grade Advanced Science Courses	Placement Criteria Guidelines
<u>Regular Placement</u> with Honors – Middle school Physical Science course	Requirements: Meets any of the 4
 8th Grade, Physical Science (on grade level) GSE Standards: 8th Grade Inquiry-Based Learning Critical Thinking Skills application GSE Science Literacy integration 	 Prior year GMAS Score: Distinguished or proficient for math. Yearly Science Average for 7th Grade: ≤ 89 Yearly Mathematics Average for 7th Grade: ≤ 89 Teacher Recommendation
<u>Advanced Placement</u> – High School Physical Science course.	Requirements: Meets 3 of 4
 GSE 9th Grade Physical Science course GSE Standards, 9th grade Physical Science Inquiry-Based Learning Critical Thinking Skills application GSE Science Literacy integration Students are planning enrollment in AP Physics in 11th or 12th grade 7th grade students are identified by April 1st for possible enrollment. The tentative identification is based on mathematics and science course averages. Final identification is made with GMAS scores.) 	 Prior year GMAS Score: Distinguished or <i>high</i> proficient for math. Yearly Science Average for 7th Grade: 90-100 Yearly Mathematics Average for 7th Grade: 90-100 Teacher Recommendation from advanced content 7th Grade Mathematics Course (example: Pre-AP Compacted 7/8 Mathematics. Advanced course identification does not apply.)

A completed, signed Student Plan is required of all students participating in the advanced *science* courses for 8th Grade.



Georgia and Muscogee County School District

Graduation Requirements

Science Courses: Four (4) units of credit in science shall be required of all students, including

- one full unit of Biology;
- one unit of either Physical Science or Physics;
- one unit of either Chemistry, Earth Systems, Environmental Science or an AP/IB course; and
- one additional science unit. The fourth science unit may be used to meet both the science and elective requirements.

** Any AP/IB science course may be substituted for the <u>appropriate</u> courses listed above. An <u>appropriate</u> course will include standards aligned to the original identified course with additional advanced content and rigor. An example of AP substitution is to replace Physical Science with AP Physics.

High School Course Credit (Science):

Unit credit may be awarded for courses offered in the middle grades that meet 9-12 GSE science requirements. Credit courses must follow GSE requirements as well as any associated End-of-Course-Test requirements.

Unit credit shall be awarded only for courses that include concepts and skills based on the Georgia Standards of Excellence (GSE) <u>for grades 9-12</u> or those approved by the State Board of Education. The Individualized Education Program (IEP) shall specify whether core courses taken as part of an IEP shall receive core unit credit. No course credit will be awarded for courses in which instruction is based on the GSE for grades K-8 AND if student does not earn the achievement level of *proficient* or *distinguished* on the GMAS EOC while enrolled in grades K-8. Course credit will not be recommended to high schools.

Assessment Requirements:

End-of-Course-Test:

- End-of-Course-Test (Milestones) is required for the Physical Science high school course.
- MCSD requires that any students enrolled in this course, during the 8th Grade, meet or exceeds standards and earn the achievement level of *proficient* or *distinguished* on the GMAS EOC to receive high school credit.
- Students not meeting or exceeding standards and earning *proficient or distinguished* on the EOC Milestones test will be required to meet all four (4) science course requirements while attending a MCSD high school for grades nine (9) through (12).

Georgia Milestones Test:

- Georgia Milestones Test in science is required for all students enrolled in the 8th Grade.
- Students enrolled in the advanced science courses in the 8th grade are expected to exceed standards on the advanced science course assessment.



STUDENT PLAN

Advanced Science Options for Grades 6-12

- As students enter the advanced middle school science coursework, it is important to understand the complete science course path from the sixth (6th) grade through the twelfth (12th).
- > This plan can be modified in the future to meet changing student needs.

Student:		
Middle School		
Date of Plan D	ign:	
Grade Level	Course – Check Planned Courses	Course Average
8 (select one)	 Advanced 8th Grade Science Course: High School Physical Science 40.0110086 (40.2110086 – Gifted) MCSD requires that any students enrolled in a high school course, during the 8th Grade, meet or exceeds standards and earn the achievement level of proficient or distinguished on the GMAS EOC to receive high school credit. 	
9	Biology	
10	 Chemistry * Elective: 	
11	 Physics * Elective: 	
12 (select one)	 AP Physics ** Dual Enrollment: * Elective: 	

* Elective Courses – any courses identified grade 9-12 courses that a student may select beyond the core requirements to fulfill the unit requirements for graduation. Students may enroll in science elective courses, in grades 9-12, which are offered at their high schools.

* * Dual Enrollment – Articulation for secondary work that has been aligned with the technical college course standards (student must meet the technical college criteria to receive the credit). Dual Enrollment/Accel allows students the opportunity to take postsecondary courses that lead to a degree program in the academic core only. Dual Enrollment/HOPE allows students the opportunity to take postsecondary courses that lead to a diploma or technical certificate only.

Student Signature:	Date:
Parent/Guardian Signature:	Date:



Completed Student Plan is kept on file at the MCSD middle school.



High School Science Course Descriptions

Physical Science

The Physical Science curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to have a richer knowledge base in physical science. This course is designed as a survey course of chemistry and physics. This curriculum includes the more abstract concepts such as the conceptualization of the structure of atoms, motion and forces, and the conservation of energy and matter, the action/reaction principle, and wave behavior. Students investigate physical science concepts through experience in laboratories and field work using the processes of inquiry.

Four domains identified for Physical Science Milestones: (description by GaDOE)

Chemistry: Atomic and Nuclear Theory and the Periodic Table

Assessment in this domain focuses on describing basic atomic structure relating the number, identifying isotopes and location of subatomic particles to chemical activity and periodic trends, describing element placement on the periodic table and related trends in chemical activity, and differentiating between radioactive particles and rays, describing radioactivity and its importance, , identifying phases based on molecular motion, and interpreting properties from data collected in a laboratory setting.

Chemistry: Chemical Reactions and Properties of Matter

This domain focuses on naming, writing, and classifying chemical formulas and compounds; balancing equations and identifying chemical reactions; balancing equations; naming compounds and formulas; demonstrating the Law of Conservation of Matter; and calculating density

Physics: Energy, Force, and Motion

Assessment in this domain focuses on identifying energy transformations; identifying and analyzing the transfer of heat energy by conduction, convection, and radiation; interpreting a phase diagram; describing and calculating velocity and acceleration; comparing Newton's three laws; calculating mechanical advantage; understanding the work of simple machines

Physics: Waves, Electricity, and Magnetism

This domain focuses on recognizing waves transfer energy; investigating light and sound phenomena and comparing light to sound; explaining Doppler effect; describing the causes of static electricity; constructing and analyzing series and parallel circuits; describing the relationship between voltage, current and resistance and relating electricity and magnetism and common applications

The **Physical Science Milestones** allows students the use of two reference resources. These resources include a page of common equations and the Periodic Table of the Elements.



MIDDLE SCHOOL SPANISH





SPANISH SEQENCE OPTIONS FOR GRADES 6-12

Grade	Option 1	Option 2	Option 3	Option 4	Option 5	Course Numbers
	Spanish	Spanish	Spanish	Spanish	Spanish	60.0670065
	Connections	Connections	Connections	Connections	Connections	(Semester) or
6						60.0670066
	Spanish	Spanish	Spanish	Spanish	Spanish	60.0680075
	Connections	Connections	Connections	Connections	Connections	(Semester) or
7						60.0680077
						Connections:
						60.0690085
						(Semester)
						60.0690088 or
						60.0840088
						Spanish 1:
		Spanish 1 -			Spanish 1-	60.0710086
	Spanish	Student earns	Spanish 1 –	Spanish 1 -	Student earns	Honors or
	Connections	an 80 average	Student earns a	Student earns a	a failing grade	60.2710086
8		or higher	70-79 average	70-79 average	69 and below	Gifted
			Spanish 2 with			Spanish 1:
			parent			60.0710019 60.2710019 (G)
9	Spanish 1	Spanish 2	permission	Spanish 1	Spanish 1	Spanish 2:
						60. 0720029
			Spanish 3			60.2720029 (G)
10	Spanish 2	Spanish 3	(optional)	Spanish 2	Spanish 2	Spanish 3:
	-					60. 0730030 60. 0730039 (H)
	Spanish 3		Spanish 4	Spanish 3	Spanish 3	60.2730039 (G)
11	(optional)	Spanish 4	(optional)	(optional)	(optional)	Spanish 4:
		•				60. 0740049 (H)
						60.2740049(G) AP Spanish
		Advance	Advance			Language:
	Spanish 4	Placement	Placement	Spanish 4	Spanish 4	60.0770049
12	(optional)	Spanish	Spanish	(optional)	(optional)	

Option 1: This option includes grade level standards and tasks for middle school students and grade level standards and task for high school students.

Option 2: This option includes grade level standards with enhanced and more complex tasks for middle school students. Students who earn an 80 average or higher in Level 1 Spanish in the eighth grade will be placed in Level 2 Spanish his/her ninth grade year of high school.

Option 3: This option includes grade level standards with enhanced and more complex tasks for middle school students. Students who earn a 70-79 average in Level 1 Spanish in eighth grade **will not be** placed in Level 2 Spanish in ninth grade unless the parent gives specific permission for the student to take Level 2 Spanish as a ninth grade student in high school.



Option 4: This option includes grade level standards with enhanced and more complex tasks for middle school students. Students who earn a 70-79 average in Level 1 Spanish in eighth grade **will not be** placed in Level 2 Spanish in the ninth grade. The student will take Level 1 Spanish in the ninth grade.

Option 5: This option includes grade level standards with enhanced and more complex tasks for middle school students. Students who earn a 69 or below average in Level 1 Spanish in the eighth grade will not be placed in Level 2 Spanish in the ninth grade. The student will take Level 1 Spanish in the ninth grade.



RESOURCES





Checklist for Documentation

Copies are held on file at school for Advanced Coursework (as defined by CCRPI):

- **STUDENT PLAN:** Advanced Mathematics for Grades 6-12
- D PARENT LETTER for Advanced Course work signed by parent and student
- RECOMMENDATION FORMS are due to the PreK-12 Curriculum and Instruction Department by the end of August



Parent Letter



Dear Parents and Students,

Student Name: _

Our school will be offering advanced level courses for high school this year. Your child has been identified as a student who has the potential to be successful. We wanted to make you aware of the fact that these courses will be offered in the areas of GSE Algebra I, GSE Physical Science, and Spanish. Your child has the opportunity to earn high school credit, if he or she has successful performance in these classes, while in the 8th grade. To earn high school credit, the student must pass the course and also earn a passing score on the EOC Georgia Milestones exam associated with the course, where applicable.

The courses are more rigorous and challenging; however, they are extremely beneficial for your son and/or daughter as it relates to preparing them early for high school and preparing them for a full option graduation, where there are no limitations on their future goals and aspirations.

Participating in these courses will take great commitment on behalf of the students, teachers, parents and our school. If we all work together, have an open line of communication and your child works hard, is dedicated, focused and studies his or her learning targets, achieving high school credit can be and will be an obtainable goal.

Please let us know if you will allow your child to participate in this historical opportunity. I would like to thank you in advance for your consideration and assistance.

Sincerely,

Principal





Muscogee County School District Advanced Level Courses Parent Notification & Permission Form

Student:			
Middle School:			
Date of Plan Des	ign:		
Grade Level	Course – Check Planned Course Enro		
9	GSE Algebra I		
9	GSE Accelerated Algebra I/Geometry A		
9	Physical Science		
9	Spanish		
NOTES:	Student must both pass the course and earn a Proficient or Distinguished Learner achie the GA Milestones EOC test associated with that course to obtain high school credit.	evement level o	
Student Signature: Date:			
Parent/Guardian Signature: Date:			
Magnet Coordinator: Date:			

Complete Plan is kept on file at the MCSD middle school.



Advanced Course Selection and Contract

Student's Name _____

School

Advanced courses are equivalent to high school-level courses and have a challenging level of expectations and requirements, which include preparing for and taking the associated Georgia Milestones Assessment End-of-Course (EOC) test. These courses often include more rigorous classroom lessons, longer homework assignments, and more challenging tests/quizzes. Therefore, students and parents need to carefully consider all factors before making a commitment to an advanced course. It must be understood that the school reserves the right to <u>remove students from the class</u> if academic performance <u>does not meet the standard</u> for advanced coursework.

Please initial in the chart below the advanced classes requested for the school year.

Parent	Student	Advanced Course
		High School Physical Science (GSE)
		Algebra 1 (GSE)
		Accelerated Algebra 1/Geometry A (GSE)
		Accelerated Geometry B/Algebra 2
		High School Spanish

Please read and check each of the below:

- □ Schools will evaluate potential candidates for advanced classes based on guidelines and criteria discussed in *Framework for Middle School Advanced Courses.*
- Students with a failing course average at the 1st 9 Weeks grading period will be flagged for potential removal from the course and placed in the traditional grade-level course.
- □ In addition to passing the course, **Students must achieve a Proficient or Distinguished Learner achievement level on** the associated Georgia Milestones Assessment EOC (where applicable) to receive high school credit for the course.

A teacher recommendation is required in the subject area of the advanced course being requested. If multiple advanced courses are requested, multiple signatures are required.

Teacher Signature & Subject Area

(Turn Over to complete Advanced Coursework Contract)



Parent or Guardian Statement of Consent:

I am aware that advanced courses are more difficult and therefore require more preparation than regular courses. I understand that if my student enrolls in an advanced course, my student will be expected to successfully complete the course and take the associated GMAS EOC assessment (where applicable). I understand that, in addition to passing the course, my student must achieve a Proficient or Distinguished Learner achievement level on the associated Georgia Milestones Assessment EOC (where applicable) to receive high school credit for the course. I also understand that if my student has a class average of less than 70% at the 1st 9 Weeks grading period the school has the authority to remove him/her from the course. I support my student's decision to participate in advanced coursework.

Date:

Student Statement of Consent:

I will commit myself to the rigorous expectations of an advanced course that may require a greater time commitment and preparation than regular courses. I will meet deadlines and complete all assignments knowing that I may be removed from this course if my class average falls below 70%. I also understand that regardless of my class average, I will not receive high school credit for this course if I do not earn an achievement level of Proficient Learner or Distinguished Learner on the EOC Georgia Milestones exam associated with the course.

Student's Signature

Date: