

SHADY GROVE MIDDLE SCHOOL



Course Offerings

School Year 2020-2021

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www.montgomeryschoolsmd.org/schools/shadygrovem

Principal

Alana D. Murray, PhD

Assistant Principals

Jennifer K. Cooper and Barbara M. Escobar



SHADY GROVE MIDDLE SCHOOL

TIMBERWOLF PRIDE!

“Give your best every day and your best will come back to you.”



Office of the Principal

January 2020

Dear Shady Grove Students and Parents:

Welcome to our new and returning students, parents and families to registration season at Shady Grove Middle School! It’s time to begin planning for the 2020-2021 school year. Each year our planning begins early to ensure that our students will have as much information as possible to make sound decisions based on their own personal needs and strengths.

Below you will find important articulation, registration, and meeting dates. Current fifth grade student’s families will hear about middle school requirements, registration process for classes, and our programs. Please call our Counseling Services Department Office at 240-740-1440, to speak to one of our grade level counselors if you have any pressing questions as we understand that there may be information you are not familiar with.

- ❖ **January 21, 2020** Rising Sixth Grade Parent Articulation Night at SGMS,
6:30 – 7:30 p.m.
(Snow Date – January 28, 2020)
- ❖ **February 14, 2020** **Registration window closes.**
- ❖ **May 21, 2020** Fifth Grade Visitation Day

Shady Grove is excited to have the opportunity to work with you in our nurturing middle school environment. I also feel fortunate as principal to represent such an outstanding school, community, and student body. I look forward to meeting and working with you.

Sincerely,

Alana D. Murray, PhD
Principal



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General Information

Middle School Education

Middle school education prepares students academically for high school and for full participation in their communities. All students have the opportunity to reach their academic potential, learn higher-order thinking skills, and develop their abilities to find and analyze information, pose problems and seek solutions, persevere, collaborate, and take responsibility for their own learning.

Locally, the Montgomery County Public Schools (MCPS) middle school principals and other leaders believe that the middle years are pivotal in defining every child's academic, social, and emotional development and in determining their future success. Our adolescent learners are faced with ever-increasing challenges in their lives and in the world around them; therefore, we must provide an educational program that both meets their unique needs and prepares them to be competitive in high school, during their postsecondary education years, in the world of work, and in our global society.

The middle school experience is integral to the early adolescent's success. All MCPS middle schools offer rigorous and challenging academic programs, elective courses, sports and extracurricular activities, and special programs to address the academic, social, and emotional characteristics of early adolescents. Students in middle school continue to focus on hitting key benchmarks as outlined in the MCPS new district wide milestones. The middle school program emphasizes the importance of providing all students with access and opportunity to engage in rigorous and challenging instruction while providing a specific focus on addressing the achievement gap of African American and Hispanic students, English-language learners, students with disabilities, and students impacted by poverty.

Shady Grove Middle School (SGMS) is committed to providing students with a comprehensive program designed to meet the individual needs of all learners. In doing so, we will implement or provide a strong focus on each of the following:

Team Structure

SGMS is organized using a grade-level team structure. Students are teamed among core subject area teachers. Team teachers meet regularly to plan for instruction, discuss student achievement and build consistency in the program. The team approach allows teachers to work with students to build a strong sense of community and to foster long-term student-teacher relationships.

Homeroom and Timbertime

Students meet with their homeroom teacher at the beginning of the year and then periodically throughout the year for logistical items such as locker assignments and report card distribution. Timber Time meets once a week on Tuesdays for 15 minutes. Students rotate meeting each week with one of their seven teachers to work collectively on custom made character education lessons and community circles.

Counseling Services

While at Shady Grove, students will be assigned a school counselor who will assist them in three major areas: academic achievement, career and educational planning, and personal and social development. The counselor may help individual students or small groups in a variety of settings. Counselors are assigned to students by grade level and remain with those students throughout their experience at Shady Grove so that a positive and lasting relationship of support is maintained.

2020-2021 Counseling Services assignments:

Alexandra Ortiz - Sixth Grade, Department Chair

Modesta Akinsanya - Seventh Grade

Jorinna Tran - Eighth Grade

Vanessa Ramos - Registrar

High School Credit for Middle School Courses

Credit and grades for middle school students taking a high school course are awarded by earning a passing grade each semester. Students who meet this criteria, by earning an A, B, C, or D, will receive high school credit. The final grade and credit earned for high school courses successfully completed while in middle school will be reported on the high school transcript, but will not be calculated into the cumulative GPA unless requested by the parent/guardian or the student if 18 years old or married (eligible students). Students/parents/guardians will be notified annually of procedures to follow in order to include such courses in their cumulative GPA. If your child is not satisfied with the grade earned, he or she may retake the course in grade 7 or grade 8 if it is available, or they may retake the course in high school. High school credit courses offered at Shady Grove may include: Algebra 1, Honors Geometry, Spanish 1, Spanish 2, Honors Spanish 3, Spanish for Spanish Speakers 1, Spanish for Spanish Speakers 2, French 1, French 2, Honors French 3, and Introduction to Engineering Design.

Maryland Comprehensive Assessment Program (MCAP)

MCAP is a computer based and will provide students, parents, educators and the community with better student information at a faster pace and gather information that helps Maryland schools strengthen our instruction and improve student performance so that our graduates are ready to move into the workforce or a post secondary institution. MCAP will continue to assess the Maryland College and Career Ready Standards in reading, English/Language arts, and mathematics.

Student Service Learning (SSL)

Student Service Learning helps students learn and develop through active participation in thoughtful, organized service that meets a recognized community need. **Students are required to complete 75 SSL hours to earn a Maryland high school diploma.** Students can earn 10 hours per year while in middle school for a total of 30 hours by successfully completing the service-learning components of designated courses. These courses include Investigations in Science 6, English 7 and Advanced US History. Teachers will provide information about the service learning projects available in their courses. The remaining required 45 SSL hours may be earned throughout their middle and high school career by involvement in approved, unpaid activities within the school and community. A list of approved non-profit organizations is available on the following website: www.montgomeryserves.org. Students who accrue more than 260 hours receive an MCPS Certificate of Meritorious Service. Students who accrue all 75 hours before April of their 8th grade year will receive the Superintendent's Student Service Learning Award.

In order to receive credit, students must keep in mind the following requirements:

1. For an activity not on the approved list, the Individual SSL Activity Request Form must be completed and approved prior to community service being performed.
2. Activities that further or promote a student's religion, faith or faith community are not eligible for SSL hours. SSL activities can be conducted by a faith based group but must serve the greater community outside their religious organization.
3. The Verification Form must be filled out completely, with particular attention given to the Student Reflection statement. The deadline for turning in this form is the first Friday in June.
4. For questions regarding SSL hours, please visit <https://www.montgomeryschoolsmd.org/departments/ssl/index.aspx> or contact Ms. Lara Frashure at 240-740-1440.

Outdoor and Environmental Education

Every Grade 6 MCPS student has the opportunity to participate in outdoor and environmental learning through authentic, engaging, and interdisciplinary experiences at the Residential Outdoor and Environmental Education Program. The course of study does the following:

- Provides students with field experiences where scientific processes are used to investigate the environment, and where the components of the MCPS Grade 6 curriculum are taught in a real-world setting. Students actively participate in Chesapeake Bay watershed lessons, including stream quality analysis and an in-depth study of predator-prey relationships. Using the natural world as both a laboratory and classroom, literacy and mathematical skills are integrated into the outdoor education experiences.
- Engages students in learning experiences during which they apply classroom knowledge and practice problem-solving strategies.
- Fosters inquiry, collaboration, and thinking in an atmosphere that utilizes various learning modalities and allows for informal and formative assessment.
- Builds positive interpersonal relationships as students learn and practice positive human relations skills with their peers and teachers.
- Encourages students to be active stewards of the environment in their daily life.
- At the Grade 6 Outdoor and Environmental Education Program, students stay in dormitory-style housing at one of three sites. There is a fee charged for this program, set by the Board of Education, but funds exist for any student who may have difficulty meeting the financial requirements of the program. All students are strongly encouraged to attend the residential outdoor and environmental education experience.

Special Education

Shady Grove has various special education services through our Learning Academic Disabilities (LAD), and Emotional Disabilities (ED) Programs. Students that receive these services have varied Individualized Education Plans (IEPs) that provide specialized instruction to address their academic needs. General and special education teachers collaborate to ensure students have meaningful opportunities to access the general education curriculum. Instruction is designed to incorporate strategies that will enable students to make progress on their IEP goals and manage the rigor of content across all subject areas. A continuum of services is offered, including consultation, full inclusion, self-contained classes, and a combination of inclusion and self-contained classes.

English for Speakers of Other Languages (ESOL)

The ESOL program provides support for non-native English speakers as they improve their American English speaking, listening, reading, writing and viewing skills. The program is broken into four sequential levels with the goal of becoming proficient in the English language.

Advanced Courses

Gifted and talented (GT), honors and advanced courses provide opportunities for academically talented and motivated students to accelerate and enhance their learning experiences through exposure to advanced content, differentiated instruction, and on-going assessment. These courses follow the approved grade level curriculum using instructional and assessment strategies that cover course objectives with more depth and require greater use of abstract and higher level thinking skills. Shady Grove offers GT, honors or advanced courses in the following content areas at all three grade levels: English, world languages, math, social studies and science.

Registration Information

Teachers have completed student recommendations for math, reading, or world language classes. Use this course bulletin as a guide to courses, programs and services available at Shady Grove. Read this book with your child to identify an elective option that best suits the interests and abilities of your child. At the end of the registration process, a letter will be distributed by counselors to all students. The due date for the return of the letter to the student's school counselor is noted on the letter.

Course Availability

All courses are subject to cancellation if there is not sufficient student demand, staffing or budget approval. Every effort will be made to provide students with a comparable course choice. Courses with insufficient enrollment may not be offered. As you select an elective option with your child, please choose a class that best suits their interests and abilities.

Changes to Course Registration

If you are not in agreement with your child's math, reading, world language or music recommendations, please contact the current teacher or school counselor to discuss your concerns. After the 2020-2021 school year begins, schedule changes will be made on an as needed basis. Schedule changes are limited due to class enrollment, staffing and course availability. It is imperative that when selecting courses, that they be chosen based on your child's interests and abilities. Elective options should be selected carefully. Students are expected to remain in electives for the duration of the school year.

Important Registration Dates

RISING SIXTH GRADERS

- January 21 Fifth Grade Parent Information Meeting, 6:30 pm
- January 29-31 Registration materials distributed to students
- February 10-14 Counselors visit elementary schools for registration
- February 14 Registration Window closes

RISING SEVENTH AND EIGHTH GRADERS

- February 4-7 Registration materials distributed to students
- February 18-21 Counselors visit science classes for registration
- February 28 Registration materials due to grade level counselor and window closes
- January 29 Registration materials due to grade level guidance counselor

Grade 6

Math

The middle school mathematics curriculum is not organized by grade level, but rather by courses, much like high school. Refer to SGMS's Mathematics Pathway on page 29. The courses in Grade 6 are described below.

Learn Zillion Math 6

Grade 6 is a year of exciting mathematics. Students study ratio and rate, learn to divide fractions by fractions, extend their understanding of numbers to include negative numbers, and understand and use variables, to name just some of the major work of this year. This course unfolds across 9 units that range in length from about 16 to 22 days. Grade 6 begins with a unit on reasoning about area and understanding and applying concepts of surface area. It is common to begin the year by reviewing the arithmetic learned in previous grades, but starting instead with a mathematical idea that students haven't seen before sets up opportunities for students to surprise the teacher and themselves with the connections they make.

Applied Investigations in Mathematics (AIM)

This course extends students' understanding of mathematical concepts developed in Math 6 and accelerates the pace of instruction to prepare for Algebra 1. This course compacts all of the Grade 7 and 8 Common Core State Standards into a single year. Students who successfully complete AIM are prepared for Algebra 1. AIM will focus on four critical areas: (1) developing a unified understanding of a number, recognizing fractions, decimals (including both those that have a finite or a repeating decimal representation), and percents as different representations of rational numbers; (2) using linear equations and systems of linear equations to represent, analyze, and solve a variety of problems; (3) comparing two data distributions and reasoning about differences between populations; (4) analyzing geometric relationships in order to solve real-world mathematical problems.

Topics of Study:

- Rational Numbers and Exponents
- Proportionality and Linear Relationships
- Statistics and Probability
- Creating, Comparing, and Analyzing Geometric Figures

AIM is designed to extend students' understanding of mathematical concepts aligned with Common Core State Standards, accelerating the pace of instruction while diving deeper into concepts.

English

The goal of the Secondary English Language Arts program is to create literate, thoughtful communicators, capable of controlling language effectively as they negotiate an increasingly complex and information-rich world.

Advanced English 6

The English 6 course uses the StudySync Grade 6 Curriculum. Each of the six units (*Testing our Limits, You and Me, In the Dark, Personal Best, Making Your Mark, and True to Yourself*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. StudySync is a comprehensive English Language Arts curriculum that is designed for all 21st century learners. StudySync combines print books with a digital platform for reading and writing. Students will have their own online digital binder where they will receive their assignments, store their writing, and receive teacher and peer reviews.

English for Emergent Multilingual Learners

The English for Emergent Multilingual courses use a version of the StudySync Grade 6 Curriculum that is slightly modified for students who are learning English. Each of the six units (*Testing our Limits, You and Me, In the Dark, Personal Best, Making Your Mark, and True to Yourself*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. Student will be scheduled in to one of two classes based on their language needs.

English 6 for ELs 1 & 2

Double period class that focuses on StudySync 6th grade curriculum coupled with English Language development in order to meet the Common Core State Standards. .

English 6 for ELs 3

Single period class that uses the StudySync 6th grade curriculum and language supports in order to meet the Common Core State Standards.

Science

The middle school science program allows students to investigate both the concepts and process skills of science. At each grade level, topics in earth science, biology, chemistry, and physics are interconnected to show students the relationships that exist between the sciences and in the natural world. Inquiry and laboratory investigations are an integral part of the program. Problem solving and online investigations are used continually to allow students to investigate authentic problems and reinforce science concepts. The middle school science program was developed through the National Research Council and supports the Next Generation Science Standards. High expectations and differentiated instruction allow all students a challenging and engaging access to science.

Investigations in Science 6 (IS6)

In sixth grade, students will investigate the topics of Chemistry, Ecosystems, Human Impact on the Environment, and Energy and Waves. The focus on chemistry in the first unit will allow students to discover elements, atoms, molecules, and how the movement of these particles relate to heat transfer and magnetism. 6th graders will explore simple chemical reactions that release and absorb energy and will apply their understanding of chemistry to a real-life situation and design a solution. Unit 2's focus on biodiversity within ecosystems will allow students to investigate populations within food webs and categorize those populations as producers, consumers, and decomposers. Students will use this information to create and maintain a habitat for a local species. As students learn about global citizenship in Unit 3 they will discover that natural resources are used by living things in a variety of ways, but how much and in what ways we use those resources affects the footprint of our planet. Groups will investigate how human activity and use of resources impacts the geosphere, hydrosphere, atmosphere, and biosphere and consider alternative solutions for the products we make and the resources that we use. They will model a solution to a variety of environmental problems created from natural resource use. In the final unit on Energy and Waves students will discover how alternative energy sources can be used to solve real world problems and design a solution. They must consider the ideas of electricity, magnetism, electrical energy production, and conversions of different types of energy, in order to debate and choose the best source of alternative energy.

Social Studies

The social studies program in middle school builds chronological and thematic understanding of world and United States history, while developing the social studies strands of geography, economics, political systems, and culture. Each social studies unit is organized around a historical era and a social studies strand. A mix of modern content and the lessons of history provide the background knowledge and thinking skills that prepare students for high school instruction and responsible citizenship. Grades six and seven focus on ancient and modern world history and cultures from Asia, Africa, Europe, and Pre Colonial Latin America. In grade eight students learn about the colonial period and early development of our nation, from the Revolution through the Industrial Revolution. At all grade levels, students build an understanding of the modern world by applying concepts of geography, economics, political systems, and culture to present-day scenarios.

Historical Inquiry in World Studies 6

Students learn about the rich culture and history from the earliest human settlements of Mesopotamia, Egypt, Greece, Rome, and China to great civilizations of the year 1000 CE. Students are challenged to analyze archeological evidence, ask questions to further their knowledge, and understand history as an ongoing investigation. They are introduced to historical thinking skills including sourcing, close reading, corroboration, and research as they analyze primary and secondary documents. This course lays a foundation for students to understand key principles of cultural, political, economic and geographic systems both in the past and today.

Historical Inquiry into Global Humanities 6

This course is built around the core Grade 6 social studies curriculum, Historical Inquiry in World Studies 6, that includes historical content from early civilizations, the empires of Greece and Rome, the dynasties of China, and civilizations of the first millennium. Cohort students will go beyond this core as they learn additional content, explore deeper connections to today, engage in investigative inquiry to strengthen their writing through Document Based Questions, and enhance their learning through relevant literature connections. They will also participate in a culminating Model UN simulation at the end of the year. Students will be enrolled in this course based on teacher recommendation and/or assessment data.

Physical Education

Physical Education 6

The daily physical education program offers a comprehensive and well-balanced series of instructional activities. At each grade level, there are six focus areas: Exercise Physiology, Biomechanics, Personal and Social Responsibility, Fitness, Physical Activity and Motor Learning. The six focus areas are taught throughout the year in the following units: net games, invasion games, striking activities, conditioning and physical fitness, and dance. Team sports and individual sports game tactics and fundamental skills are taught throughout the units. Students are assigned a locker with a lock for their clothes. Each student is expected to change into approved P.E. attire, i.e., shorts, t-shirts, sweats/warm-ups, and proper shoes.

Comprehensive Health Education Grade 6

Comprehensive health education is taught for a term of 9-weeks during Grade 6. Knowledge, concepts, skills, and strategies essential to making healthful decisions are presented promoting lifelong health and well-being. Certified Health Education teachers implement a variety of learning activities to promote and practice wellness skills and health literacy. The development of lifelong positive health-related attitudes and behaviors are emphasized to promote self-reliance and self-regulation. Skills include accessing information, decision-making, goal setting, communication skills, analyzing influences, and advocacy.

Key Concepts

- Mental and emotional health - personal well-being; analyzing influences; accessing information; interpersonal communication; decision making; goal setting; managing emotions; stress-management; advocacy.
- Alcohol, tobacco, and other drugs - benefits of a drug-free lifestyle.
- Personal and consumer health - personal hygiene; health care products.
- Safety and injury prevention - media, technology, and harassment; cyber-bullying and bullying; personal safety; first aid and emergency response.

Arts Program Electives

The Arts Program in seventh grade provides students the opportunity to explore their creative abilities and develop an appreciation for the arts. All sixth grade students will be enrolled in Unified Arts Rotation and will then have the option to select digital literacy, music, or world languages course. **The availability of all courses are based on student enrollment and the availability of staffing.**

Unified Arts Rotation

All 6th grade students will take each of the four quarterly courses listed below.

<p style="text-align: center;"><u>MS Studio Art 1</u></p> <p>Students will be provided multiple and varied opportunities explore IDENTITY and the many ways this theme can be represented through visual art. Students will develop a fundamental understanding of ideation, media techniques, formal qualities, and compositional devices. Students will explore a variety of traditional student media and techniques including drawing, painting, printmaking, sculpture, ceramics, and crafts to create artworks.</p>	<p style="text-align: center;"><u>General Music</u></p> <p>General music is a course that will give students the opportunity to explore drumming, piano, ukulele, and music technology, as well as learn music history and music theory. Students will be able to improvise and write their own music. The goal is to help students better understand music and develop a love for it.</p>
<p style="text-align: center;"><u>Introduction to Family and Consumer Sciences</u></p> <p>We are excited to offer a new elective for 6th graders this year called Introduction to FACS. This class is designed to give students a broad range of learning experiences which are carefully selected to meet the developmental needs of young adolescents. Intro to FACS will cover topics including basic cooking skills, basic hand-sewing, goal setting, decision making, leadership, and teamwork. The goal of this class is to develop improved self-images and conficend in your ability to think creatively while having fun.</p>	<p style="text-align: center;"><u>Engineering & Robotic Design</u></p> <p>In this course, students learn all about the nature of technology and problem solving. Students have opportunities to study the scope of technology and its impacts on society. They learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Students participate in engineering-design activities to understand how criteria, constraints, and processes affect designs. Students are involved in activities and experiences where they learn about brainstorming, visualizing, modeling construction, testing, experimenting, and refining designs. Students also develop skills in researching and communicating design information. Students will receive instruction on introductory computer aided drafting software and have the opportunity to explore robotic programming.</p>

Full Year Elective Courses

The following courses are full year elective options for sixth grade students.

Digital Literacy 1

The Digital Literacy 1 curriculum focuses on developing critical and creative thinking through reading, writing, speaking, listening, and viewing in a 21st Century approach. Working through a problem-based process, students learn to define real world problems of interest, research the causes of those problems using real-time global texts and then create solutions to address the problems. Students will advance their understanding of comprehension, analysis, and evaluation of text as well as vocabulary acquisition through reading complex informational and argumentative texts in a technology-rich medium. Students will collaborate regularly both through the research and the solution phases of their investigations. Students' curiosity and motivation will engage the students in their investigations while learning and refining the processes that will enrich all other courses and prepare them for college and career projects.

MS Beginning Wind Percussion

This course is for students who have no prior experience on a band instrument. Students will learn about and compare/contrast all of the band instruments. They will choose an instrument with the guidance of the music director and learn all prerequisite skills for Band 1 and Band 2. These skills include reading and performing music notation, writing music, and basic instrument-specific skills. Students will perform in two evening concerts at Shady Grove and participate in various other activities as described in the Instrumental Music Calendar.

MS Beginning Strings

This course is for students who have no prior experience on an orchestra instrument. Students will learn about and compare/contrast all of the orchestral instruments. They will choose an instrument with the guidance of the music director and learn all prerequisite skills for Orchestra 1 and Orchestra 2. Students will perform in two evening concerts at Shady Grove and have the opportunity to participate in various other music activities as described in the Instrumental Music Calendar. MS Orchestra I.

MS Orchestra I

This course is for students who have not taken a middle school level orchestra class, but do have prior experience from an elementary school. Students will review and refine instrument-specific skills learned in elementary school. Students will, expand music vocabulary and learning to read and perform more advanced music notation. They will perform grade level 1-2 music. Students will perform in two evening concerts and participate in various other music activities as described in the Instrumental Music Calendar. Students in this course are eligible to audition for MCPS All-County and Honors groups.

MS Band 1

This course is for students **who have not taken a middle school band class, but who do have prior experience from an elementary school**. Students will review and refine instrument-specific skills learned in elementary school. Students will expand music vocabulary and learn how to read and perform more advanced music notation, performing grade level 1-2 music. Students in this course will perform in two evening concerts and have the opportunity to participate in various other music activities as described in the Instrumental Music Calendar. Students are eligible to audition for MCPS All-County and Honors groups.

Chorus

Since this may be the first choral experience for some participants, emphasis is placed on developing singing fundamentals, including diction, breathing and breath support, tone production and pitch discrimination, phrasing, interpretation and expression. Individual voices are monitored, especially those of young men whose voices are changing. Students learn a wide variety of choral music appropriate for their developing levels. Chorus members are required to participate in evening performances and in the Montgomery County Chorus Festival.

World Languages

High school credit is awarded for earning a passing grade in both the A and B sections of a world language class. Parents can opt in to have the grade appear on the high school transcript. The language options are listed below. Enrollment in all courses is a full year commitment.

French 1A

Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. NOTE: This is the first half of a two year course. Students must pass the full year of 1A and the full year of 1B in order to earn one high school credit

Spanish 1A

Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. NOTE: This is the first half of a two year course. Students must pass the full year of 1A and the full year of 1B in order to earn one high school credit

Grade 7

Math

The middle school mathematics curriculum is organized by grade level, but rather by courses, much like high school. Refer to Shady Grove Middle School's Mathematics Pathway on page 29. The courses in Grade 7 are described below.

Learn Zillion Math 7

As in Math 6, students start Math 7 by studying scale drawings, an engaging geometric topic that supports the subsequent work on proportional relationships in the second and fourth units. It also makes use of Math 6 arithmetic understanding and skill, without arithmetic becoming the major focus of attention at this point. Geometry and proportional relationships are also interwoven in the third unit on circles, where the important proportional relationship between a circle's circumference and its diameter is studied. By the time students reach the fifth unit on operations with rational numbers, both positive and negative, students have had time to brush up on and solidify their understanding and skill in Math 6 arithmetic. The work on operations on rational numbers, with its emphasis on the role of the properties of operations in determining the rules for operating with negative numbers, is a natural lead-in to the work on expressions and equations in the next unit. Students then put their arithmetical and algebraic skills to work in the last two units, on angles, triangles, and prisms, and on probability and sampling.

Curriculum 2.0 Investigations into Mathematics (IM)

Curriculum 2.0 (C2.0) Investigations into Mathematics (IM) extends students' understanding of mathematical concepts developed in Mathematics 6 and accelerates the pace of instruction to

prepare for C2.0 Algebra 1. This course compacts all of the Grade 7 Common Core State Standards and much of the Grade 8 Common Core State Standards into a single year. Students who successfully complete C2.0 IM are prepared for C2.0 Algebra 1 in Grade 8. The remaining Grade 8 CCSS are compacted into the C2.0 Algebra 1 course. Instruction for C2.0 IM will focus on four critical areas: (1) developing a unified understanding of number, recognizing fractions, decimals (including both those that have a finite or a repeating decimal representation), and percents as different representations of rational numbers; (2) using linear equations and systems of linear equations to represent, analyze, and solve a variety of problems; (3) comparing two data distributions and reasoning about differences between populations; (4) analyzing geometric relationships in order to solve real-world mathematical problems.

Curriculum 2.0 Algebra 1

Curriculum 2.0 (C2.0) Algebra 1 is designed to analyze and model real-world phenomena. Exploration of linear, exponential, and quadratic functions forms the foundation of the course. Key characteristics and representations of functions – graphic, numeric, symbolic, and verbal – are analyzed and compared. Students develop fluency in solving equations and inequalities. One- and two-variable data sets are interpreted using mathematical models.

English

Advanced English 7

The English 7 course uses the StudySync Grade 7 Curriculum. Each of the six units (*Conflicts and Clashes*, *Highs and Lows*, *Chasing the Impossible*, *Moment of Truth*, *Test of Time*, and *The Power of One*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. StudySync is a comprehensive English Language Arts curriculum that is designed for all 21st century learners. StudySync combines print books with a digital platform for reading and writing. Students will have their own online digital binder where they will receive their assignments, store their writing, and receive teacher and peer reviews.

English for Emergent Multilingual Learners

The English for Emergent Multilingual courses use a version of the StudySync Grade 7 Curriculum that is slightly modified for students who are learning English. Each of the six units (*Conflicts and Clashes*, *Highs and Lows*, *Chasing the Impossible*, *Moment of Truth*, *Test of Time*, and *The Power of One*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. StudySync is a comprehensive English Language Arts curriculum that is designed for all 21st century learners. StudySync combines print books with a digital platform for reading and writing. Students will have their own online digital binder where they will receive their assignments, store their writing, and receive teacher and peer reviews. Student will be scheduled in to one of two classes based on their language needs.

English 7 for ELs 1 & 2

Double period class that focuses on StudySync 7th grade curriculum coupled with English Language development in order to meet the Common Core State Standards.

English 7 for ELs 3

Single period class that uses the StudySync 7th grade curriculum and language supports in order to meet the Common Core State Standards.

Science

Investigations in Science 7 (IS7)

In seventh grade science, students will investigate the topics of Hydroponics, Body Systems, Genetics, and Biological History. The focus on the creation of a Hydroponic growing system will allow students to investigate a variety of different systems and growing mediums for raising plants. Plants will be used to introduce the structure and function of living organisms, and students will learn about the characteristics of living things, parts of the cell, and cellular processes. Unit 2's focus on body systems will allow students to explore how the interactions of each system affect the overall performance of an organism. Students will explore how matter and energy are processed by organisms to build, maintain, and repair themselves and relate structure and function of body systems to nutritional requirements and disease prevention. During Unit 3 students will study the principles of heredity and genetics. They will learn how organisms reproduce and transfer their genetic information to their offspring. Students will use biotechnical processes to explore the genetic characteristics of organisms and will conduct a DNA extraction. A microarray will be performed as a way of checking the genotypes of the offspring. For the final unit of the year, 7th graders will study Earth's history and explore how organisms have changed over time. Students will examine the fossil record and construct explanations from mass extinctions. They will explore the concepts of natural selection and adaptation and will learn that traits of an organism can change as a result of environmental conditions or a need for survival. Students will explore the similarities between organisms and use biotechnical processes, such as DNA fingerprinting, as a means of identification.

Social Studies

Historical Inquiry into World Studies 7

Through the study of world civilizations and global interactions from 1000 CE to 1450 CE, students learn about political, cultural, geographic and economic systems today and in the past. They study the rise of empires and nation-states in Europe, Africa, and Latin America and the impacts of their interactions still felt today. Building on historical thinking skills learned in Grade 6, students continue to engage in sourcing, close reading, corroboration, investigation, contextualization, and historical interpretation as they examine primary and secondary sources.

Historical Inquiry into Global Humanities 7

This course is built around the core Grade 7 social studies curriculum, Historical Inquiry in World Studies 7, that includes historical content from civilizations of Latin America, Africa, and medieval Europe as well as global interactions following Columbian Exchange. Cohort students will go beyond this core as they learn additional content, explore deeper connections to today, engage in investigative inquiry to strengthen their writing through Document Based Questions, and enhance their learning through relevant literature connections. They will also participate in the National History Day (NHD) competition to research historical topics related to a NHD annual theme. Students will be enrolled in this course based on teacher recommendation and/or assessment data.

Physical Education

Physical Education 7

The daily physical education program offers a comprehensive and well-balanced series of instructional activities. At each grade level there are six focus areas: Exercise Physiology, Biomechanics, Personal and Social Responsibility, Fitness, Physical Activity and Motor Learning. The six focus areas are taught throughout the year through the following units: net games, invasion games, striking activities, conditioning and physical fitness, and dance. Individual and team game tactics as well as fundamental skills are taught throughout the units. Each student is expected to change into approved P.E. attire, i.e., shorts, t-shirts, sweats/warm-ups, and proper shoes. Students are assigned a locker with a lock for their clothes.

Comprehensive Health Education Grade 7

Comprehensive health education is taught for a term of 9-weeks during Grade 7. Knowledge, concepts, skills, and strategies essential to making healthful decisions are presented promoting lifelong health and well-being. Certified Health Education teachers implement a variety of learning activities to promote and practice wellness skills and health literacy. The development of lifelong positive health-related attitudes and behaviors are emphasized to promote self-reliance and self-regulation. Skills include accessing information, decision-making, goal setting, communication skills, analyzing influences, and advocacy.

Key Concepts

- **Mental and emotional health** – self-esteem; conflict resolution skills; mental illness; self-injury; depression and suicide prevention.
- **Alcohol, tobacco, and other drugs** - alcohol; inhalants; other drugs and drug trends.
- **Personal and consumer health** - risk factors for non-communicable diseases; risk factors for communicable diseases; protective factors.
- **Family life and human sexuality** - family; components of health relationships; personal health care; condom use; tolerance for sexual orientation, reproductive systems
- **Disease prevention and control** - accessing information about sexually transmitted infections; accessing information about HIV/AIDS; analyzing influences about communicable diseases; goal setting to prevent communicable diseases.

Parents of grade seven students will receive information about the two opt-out units of Disease Prevention and Control and Family Life and Human Sexuality at the beginning of the school year through an evening meeting. Parents wishing to opt their child out of these units may check “No” on the permission form sent out during the first week of school. If no permission form is returned, the student will receive this instruction. Students opted out will receive an alternate independent study unit to be completed in an alternate location.

Arts Program Electives

The Arts Program in seventh grade provides students the opportunity to explore their creative abilities and develop an appreciation for the arts. Most seventh grade students will be enrolled in two periods of art courses. Arts courses include art, computers, FACS, music, yearbook, and world languages. **The availability of all courses are based on student enrollment and the availability of staffing.**

Unified Arts Rotation: Semester Courses

The seventh grade Unified Arts Rotation are semester long courses. Students have the option to choose the paired set of semester courses listed below

<u>MS Studio Art 2</u>	<u>Family and Consumer Sciences (FACS)</u>
Students will explore how the theme of RELATIONSHIPS can be used to create artworks that communicate personal meaning and individual ideas. Students will gain a deeper understanding of how artists generate and conceptualize ideas, refine craftsmanship through practice and persistence, and intentionally arrange compositional elements to effectively communicate meaning. Students with no previous art experience may begin at Level 2 with permission of the visual art teacher. Students will refine their ability to use traditional studio media and techniques including drawing, painting, printmaking, sculpture, ceramics, and crafts to create artworks.	Today's students live in a diverse and changing world requiring many decisions associated with daily living and carrying out the complex process of personal resource management. Throughout this course student learning will focus on making decisions on selecting and caring for clothing, other textile products, and living environments; learning to be an informed consumer, exploring education and career goals and making food choices that will optimize health and well-being. In addition, a special unit of study will focus on financial literacy. Students will be introduced to the knowledge, skills, attitudes, and behaviors associated with the successful management of personal finances.

Full Year Elective Courses

The following courses are full year elective options for seventh grade students.

Computer Aided Drafting & Design with Applied Robotic Engineering (CADD-ARE)

In this hands-on course, students will design & build electrical circuits, an underwater robot, a model house, and receive an introduction to computer science and coding. Students will learn the engineering design process and apply that process each unit to engineering challenges and projects. Students will focus on collaboration skills & teamwork, learn the art of drafting, learn the function of key electronic components, research housing trends, permitting, and the buying and selling of houses, and explore basic coding and script writing for games. Students will also research, design, and build models related to various projects. Through a partnership with the Naval Surface Warfare Center, Carderock Division in Bethesda, the students have the opportunity to build the Sea Perch aquatic ROV (Remotely Operated Vehicle). Through his partnership, they will work with engineers from the warfare center & take a field trip to the warfare center as a culminating activity. Throughout the units of study, students will be using industry standard computer software, such as *Autodesk Inventor* (CAD software) and *Envisioneer* (architectural design software). Mathematics, science, and technology concepts will be applied throughout the course to support the engineering processes. There are no prerequisites for enrolling in CADD-ARE, any 7th grade student may enroll. However, this course is a prerequisite for enrolling in Introduction to Engineering Design (IED) A/B in Grade 8 (high school level course).

SGMS Yearbook

Students will work in a digital environment learning the fundamentals of good design concepts as well as the fundamentals of good photography. Students will gain skills in the following areas: page design, publishing techniques, copywriting, editing, photography, record keeping, time management, teamwork, marketing, and leadership skills. Students will work collaboratively to design and create the SGMS yearbook.

MS Chorus 2

Students will create, perform, and respond to music in a variety of styles/genres. Students will continue to develop the fundamentals of proper vocal technique and choral singing in relation to posture, breath control, tone, intonation, diction, blending, singing in harmony, music literacy, and sight-singing. Students will primarily sing state level 2-3 music. Students are expected to participate in two evening concerts at Shady Grove and in the MCPS Choral Adjudication Festival. Students may also participate in other activities as described in the Choral Music Handbook.

MS Band 2

This course is for students who have previously enrolled in Beginning Winds & Percussion, Band 1, or equivalent in middle school. Students will reinforce and refine instrument-specific skills in preparation for high school level band courses. Students will add various advanced music notation & concepts. The Advanced Band will learn grade level 2-3 music and will learn at a faster pace. They will perform in evening concerts, the MCPS county festival, and the Music in the Parks festival. Students in this course are eligible to audition for MCPS All-County and Honors groups.

MS Orchestra 2

This course is for students who have previously enrolled in Beginning Strings, Orchestra 1, or equivalent in middle school. Students will reinforce and refine instrument-specific skills in preparation for high school level band courses. Students will continue to reinforce music notation reading and will add various advanced music notation & concepts. The Advanced Orchestra will learn grade level 2-3 music. They will perform in evening concerts, the MCPS county festival, and the Music in the Parks festival. Students in this course are eligible to audition for MCPS All-County and Honors groups.

World Languages

High school credit is awarded for earning a passing grade in both the A and B sections of a world language class. Parents can opt in to have the grade appear on the high school transcript. The language options are listed below. Enrollment in all courses is a full year commitment.

French 1 A

Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. NOTE: This is the first half of a two year course. Students must pass the full year of 1A and the full year of 1B in order to earn one high school credit

Spanish 1 A

Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. NOTE: This is the first half of a two year course. Students must pass the full year of 1A and the full year of 1B in order to earn one high school credit

French 2 A/B

This is a continuation of French 1. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in French 2: successful completion of French 1.

Spanish 2 A/B

This is a continuation of Spanish 1. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in Spanish 2: successful completion Spanish 1.

Spanish for Spanish Speakers 1 A/B

Spanish for Spanish Speakers provides language instruction for students with proficiency in Spanish, either because it is their first language or it is spoken extensively in their home. Each course integrates history, culture, language, and connections related to the Spanish-speaking world.

Grade 8

Math

The middle school mathematics curriculum is organized by grade level, but rather by courses, much like high school. Refer to Shady Grove Middle School's Mathematics Pathway on page 29. The courses in Grade 8 are described below.

Learn Zillion Math 8

In this course, eighth graders tackle exciting new ideas and concepts in preparation for work in high school. They extend earlier understandings of proportional relationships to study linear relationships and work with linear equations in one and two variables. Among other things, they are also introduced to the idea of functions and have their first encounter with irrational numbers. This course unfolds across 9 units that range in length from about 16 to 22 days.

Curriculum 2.0 Algebra 1

Curriculum 2.0 (C2.0) Algebra 1 is designed to analyze and model real-world phenomena. Exploration of linear, exponential, and quadratic functions forms the foundation of the course. Key characteristics and representations of functions – graphic, numeric, symbolic, and verbal – are analyzed and compared. Students develop fluency in solving equations and inequalities. One- and two-variable data sets are interpreted using mathematical models.

Curriculum 2.0 Honors Geometry

Curriculum 2.0 (C2.0) Geometry formalizes and extends students' geometric experiences from the elementary and middle school grades. Students explore more complex geometric situations and deepen their understanding of geometric relationships, progressing towards formal mathematical arguments. Instruction at this level will focus on the understanding and application of congruence as a basis for developing formal proofs; the relationship among similarity, trigonometry, and triangles; the relationship between two- and three-dimensional objects and their measurements; exploration of geometric descriptions and equations for conic sections; and application of geometric concepts in modeling situations. Students successful in this course will go on to take Honors Algebra 2 or Algebra 2 the following year.

English

English 8

The English 8 course uses the StudySync Grade 8 Curriculum. Each of the six units (*Suspense!, In Time of War, A Moral Compass, The Civil War, Moment of Truth, Test of Time, and The Power of One*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. StudySync is a comprehensive English Language Arts curriculum that is designed for all 21st century learners. StudySync combines print books with a digital platform for reading and writing. Students will have their own online digital binder where they will receive their assignments, store their writing, and receive teacher and peer reviews.

English for Emergent Multilingual Learners

The English for Emergent Multilingual courses use a version of the StudySync Grade 8 Curriculum that is slightly modified for students who are learning English. Each of the six units (*Suspense!, In Time of War, A Moral Compass, The Civil War, Moment of Truth, Test of Time, and The Power of One*) include lesson sequences and materials structured to meet the Common Core State Standards in meaningful ways and to provide flexibility for a range of learners. Formative assessments in each unit are designed to measure student progress towards mastering focus indicators for the processes and content of English. StudySync is a comprehensive English Language Arts curriculum that is designed for all 21st century learners. StudySync combines print books with a digital platform for reading and writing. Students will have their own online digital binder where they will receive their assignments, store their writing, and receive teacher and peer reviews. Student will be scheduled in to one of two classes based on their language needs.

English 8 for ELs 1 & 2

Double period class that focuses on StudySync 8th grade curriculum coupled with English Language development in order to meet the Common Core State Standards. .

English 8 for ELs 3

Single period class that uses the StudySync 8th grade curriculum and language supports in order to meet the Common Core State Standards.

Science

Investigations in Science 8

Eighth grade students will investigate the topics of Weather and Climate, Geology and Plate Tectonics, Physics, and Astronomy. As students investigate Unit 1 focusing on Weather and Climate, eighth graders will learn about geographical influences on climate, the water cycle, oceanic and atmospheric circulation, and climate change. Students will apply their understanding of these concepts to create an emergency preparedness plan for a community that has a history of weather related disasters. Geology will allow students to investigate the characteristics of Earth's structure, continental drift, plate tectonics, minerals, types of rocks, weathering and erosion. Students will apply their understanding of these concepts to design and create Earthquake resistant structures. During the 3rd unit students will learn about kinetic and potential energy, describing motion, forces, and Newton's Laws. Students will apply their understanding to the design, creation, and launch of a model rocket constructed in class. The final unit covering Astronomy, students will learn about Earth's motions, the reasons for the seasons, gravity, and characteristics of the solar system, galaxy, and universe. Students will apply their understanding

to design a movie set that depicts the living conditions on a human colony located on either a planet, a moon, or an asteroid within our solar system.

Social Studies

Historical Inquiry in US History 8

Students explore the history of the United States from colonization to post Civil War Reconstruction and Industrialization while extending their understanding of political, economic, geographic and cultural systems. Throughout the course students analyze multiple perspectives and study how the diverse populations of Americans, including Native Americans, African Americans, women, immigrants, and Mexican Americans contributed to and were impacted by events. Connections to current issues help students identify patterns and themes that have shaped America in the past and continue to shape the nation today. Students extend their literacy practices by using the historical thinking skills learned in Grades 6 and 7 to build effective, evidence based historical arguments. This course prepares students for continuing their study of U.S. History in Grade 9.

Physical Education

Physical Education 8

The daily physical education program offers a comprehensive and well-balanced series of instructional activities. At each grade level there are six focus areas: Exercise Physiology, Biomechanics, Personal and Social Responsibility, Fitness, Physical Activity and Motor Learning. The six focus areas are taught throughout the year in the following units: net games, invasion games, striking activities, conditioning and physical fitness, and dance. Team sports and individual sports game tactics and fundamental skills are taught throughout the units. *Each student is expected to change into approved P.E. attire, i.e., shorts, t-shirts, sweats/warm-ups, and proper shoes. Students are assigned a locker with a lock for their clothes.

Comprehensive Health Education Grade 8

Comprehensive health education is taught for a term of 9-weeks during Grade 8. Knowledge, concepts, skills, and strategies essential to making healthful decisions are presented promoting lifelong health and well-being. Certified Health Education teachers implement a variety of learning activities to promote and practice wellness skills and health literacy. The development of lifelong positive health-related attitudes and behaviors are emphasized to promote self-reliance and self-regulation. Skills include accessing information, decision-making, goal setting, communication skills, analyzing influences, and advocacy.

Key Concepts

- **Alcohol, tobacco, and other drugs**—accessing information about tobacco and marijuana; accessing information about addiction, and community treatment resources.
- **Personal and consumer health**—accessing information about the identification of food borne illnesses, preventing the spread of food borne illnesses.
- **Family life and human sexuality**—decision making about appropriate use of social media; sexual behaviors and limits, decision making and contraception; teen pregnancy and parenting; accessing information about maternal changes occurring during pregnancy.
- **Safety and injury prevention**—using decision making and interpersonal communication skills to use technology responsibly.
- **Nutrition and fitness**—analyzing influences on body image; managing weight; accessing information about eating disorders.

Parents of grade eight students will receive information about the opt-out unit of Family Life and Human Sexuality at the beginning of the school year through an evening meeting. Parents wishing to opt their child out of this unit may check “No” on the permission form sent out during the first week of school. If no permission form is returned, the student will receive this instruction. Students opted out will receive an alternate independent study unit to be completed in an alternate location.

Arts Program Electives

The Arts Program in eighth grade provides students the opportunity to explore their creative abilities and develop an appreciation for the arts. Most eighth grade students will be enrolled in two periods of art courses. Arts courses include art, engineering, FACS, music, yearbook, and world languages. **The availability of these courses are based on student enrollment and the availability of staffing.**

Unified Arts Rotation: Semester Courses

Unified Arts Rotation courses are semester long classes. Eighth grade students have the option to choose from two sets of semester-long courses paired below. Digital Art 8 and FACS OR TV Studio and Theater.

<p style="text-align: center;"><u>Digital Art 8</u></p> <p>Digital Art 8 is a class in which students will master skills in computer arts through a web based program. Students will learn skills such as photo manipulation, digital painting and logo design. This course will have a strong focus on how graphic computer design can lead to practical arts careers. Students will study the different opportunities that come with the skills they gain in the course to excel in digital arts and expand their skills. Students will engage in units such as designing music album covers, comic book covers, still life photography, digital landscape, and restaurant logo design.</p>	<p style="text-align: center;"><u>Food and Nutrition (FACS)</u></p> <p>This is a semester class that will focus on the interrelationship between nutritious food choices and health and wellness. Students will learn about food and kitchen safety, the elements of good nutrition, and budgeting the food dollar. Students will also be given weekly cooking assignments in the classroom kitchens to learn and refine their cooking skills</p>
<p style="text-align: center;"><u>Television Studio</u></p> <p>This course introduces students to the fundamentals of television. Students learn production fundamentals, how television developed, and television technology through studio hands-on experience. Students create their own productions using a school's video equipment. Field trips and guest lecturers provide initial career information. Course fees may apply.</p>	<p style="text-align: center;"><u>Theater</u></p> <p>This is a beginning to intermediate level course where students will explore how the theater is a space that both creates and challenges COMMUNITY. Theatre artist create an ensemble amongst themselves which functions as a safe space for risk-taking and creating, engaging to study a variety of dramatic works, and participating in the creation and enhancement of ensemble. The focus is on improvisation, vocal work, introduction to acting, monologue work, scene study, and performance.</p>

Full Year Electives

The following courses are full year elective options for eighth grade students.

Introduction to Engineering Design (IED)

This high school level course is for eighth grade students. It is the first course in a national engineering program called *Project Lead the Way*. Magruder high school offers an additional 5 *Project Lead the Way* Courses. To enroll in IED at Shady Grove, students must be enrolled in Algebra AND have successfully completed CADD-ARE in 7th grade OR students may enroll in IED if they are also enrolled in Geometry. Students in Geometry do not have to take CADD-ARE as a prerequisite. The major focus of this course is learning how to take an idea that will eventually be manufactured or produced through the engineering design process. Students learn about various aspects of engineering and engineering design. They will apply what they learn through various activities, projects, and problems. The course covers the role of an engineer, the engineering design process, product design, sketching, communicating through drawing & dimensioning, statistical analysis, properties of shapes & solids, and reverse engineering. Students are expected to develop thinking skills by solving real-world engineering problems and work both individually and in teams to complete challenging, self-directed engineering tasks. They will produce both physical & virtual products of their designs, including designs created on the 3D printer. This course requires students to learn & use the software *Inventor*, which is a state of the art 3-D design software package from *AutoDesk*. The software allows students to create technical working drawings of their designs & solutions. Students who successfully complete both semesters earn one technology education credit toward high school graduation. This credit will fulfill the student's technology education requirements for graduation.

SGMS Yearbook

Students will work in a digital environment learning the fundamentals of good design concepts as well as the fundamentals of good photography. Students will gain skills in the following areas: page design, publishing techniques, copywriting, editing, photography, record keeping, time management, teamwork, marketing, and leadership skills. Students will work collaboratively to design and create the SGMS yearbook.

Instrumental Music & Chorus

Chorus 2

Students will create, perform, and respond to music in a variety of styles/genres. Students will continue to develop the fundamentals of proper vocal technique and choral singing in relation to posture, breath control, tone, intonation, diction, blending, singing in harmony, music literacy, and sight-singing. Students will primarily sing state level 2-3 music. There will likely be a minimum of two school concerts as well as the opportunity to participate in other festivals/performances and students are expected to participate in all performances. An audition and/or a prerequisite of MS Chorus 1 may be required.

MS Band 2

This course is for students who have previously enrolled in Beginning Winds & Percussion, Band 1, or equivalent in middle school. Students will reinforce and refine instrument-specific skills in preparation for high school level band courses. Students will add various advanced music notation & concepts. The Advanced Band will learn grade level 2-3 music and will learn at a faster pace. They will perform in evening concerts, the MCPS county festival, and the Music in the Parks festival. Students in this course are eligible to audition for MCPS All-County and Honors groups.

MS Orchestra 2

This course is for students who have previously enrolled in Beginning Strings, Orchestra 1, or equivalent in middle school. Students will reinforce and refine instrument-specific skills in preparation for high school level band courses. Students will continue to reinforce music notation reading and will add various advanced music notation & concepts. The Advanced Orchestra will learn grade level 2-3 music. They will perform in evening concerts, the MCPS county festival, and the Music in the Parks festival. Students in this course are eligible to audition for MCPS All-County and Honors groups.

World Languages

Highschool credit is awarded for earning a passing grade in both the A and B sections of a world language class. Parents can opt in to have the grade appear on the high school transcript. Enrollment in all courses is a full year commitment.

French 2 A/B

This is a continuation of French 1. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in French 2: successful completion of French 1.

Honors French 3 A/B

This is a continuation of French 2. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in French 3: successful completion French 1 and French 2..

Spanish 1 A/B

Spanish 1 covers the curriculum of 1A and 1B in one year's time. The program is designed to enable students to communicate in a culturally appropriate and meaningful manner in both the spoken and written form through authentic situations that students are most likely to encounter. Students develop listening, speaking, reading, and writing skills in addition to acquiring knowledge of the culture emphasized. Vocabulary acquisition is heavily emphasized and is organized around themes such as family, food, clothing, travel, etc. Grammar is also taught as a necessary component of effective communication, with greater emphasis on structural accuracy to enhance communication in each year of successive language study.

Spanish 2 A/B

This is a continuation of Spanish 1. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in Spanish 2: successful completion Spanish 1.

Honors Spanish 3 A/B

This is a continuation of Spanish 2. Additional vocabulary and grammar is added to the themes studied the year before. Greater standards for grammatical accuracy are imposed in both the written and spoken forms of the language. Criteria for enrollment in Spanish 3: successful completion Spanish 1 and Spanish 2.

Spanish for Spanish Speakers 1 A/B

Spanish for Spanish Speakers provides language instruction for students with proficiency in Spanish, either because it is their first language or it is spoken extensively in their home. Each course integrates history, culture, language, and connections related to the Spanish-speaking world.

Spanish for Spanish Speakers 2 A/B

Spanish for Spanish Speakers 2 continues to provide language instruction for students with proficiency in Spanish, either because it is their first language or because it is spoken extensively in the home. Spanish for Spanish Speakers 2 integrates history, culture, language, and connections related to the Spanish-speaking world. Students must have successfully completed Spanish for Spanish Speakers 1.

Support Courses

Students will be enrolled in the following courses based on teacher recommendation and/or assessment data. Enrollment in a support class will replace one elective class. Students with IEPs may be selected to participate in self-contained interventions as dictated by their IEPs.

Math 180 Mathematics Intervention (Grades 6 and 7)

Math 180 is a comprehensive system of instruction, assessment, and professional development designed to help struggling students thrive in algebra. The program directly addresses individual needs through adaptive and instructional software, high-interest materials, and direct instruction in mathematical calculation and application skills. Students rotate among a small group, teacher-directed lessons, a computer station for reinforcement and practice, and an independent brain arcade where students complete math problems at their instructional level. Built with the student in mind, the learning experience is a uniquely motivating and fun way to accelerate to grade-level ability. Acceptance into this course is based on teacher recommendation, MAP-M scores, and other county assessment data.

MS Academic Literacy (iLit) (Grades 6-8)

The single-period reading intervention program for students of all grade levels utilizes technology, stations, and high interest reading materials to provide support to students across a range of reading levels. Currently we are using iLit program but reserve the right to change materials based on student needs and MCPS recommendations. Enrollment into this course is based on teacher recommendation, MAP-R scores, and other county assessment data.

READ 180 (Grades 6-8)

READ 180 is an intensive reading program which uses a small group approach through technology, high-interest literature, and direct instruction in reading, writing and vocabulary skills to meet the needs of students who experience difficulty comprehending grade-level reading material. Acceptance into this course is based on teacher recommendation, MAP-R scores, and other county assessment data.

Resource / Pathways to Success (Grades 6-8)

A course designed to teach skills that will support academic success and build stronger independent learners. Students learn test taking strategies, organizational skills, and strategies for time management. During the class period, students actively monitor their academic achievement and develop strategies to maintain or improve their grades. The class provides time

for students to get support with front loading material, reteaching, missing assignments, projects and homework.

MCPS Mathematics

Math Courses that Lead to College and Career Readiness

The MCPS Mathematics program develops a deep understanding of mathematics by building a strong foundation of number sense at the elementary level before moving into more advanced content. The chart below shows the course options available to students in Middle School that will prepare them for success in college and careers.

For incoming 6th graders, prerequisites are required for the following courses:

LZ Math 6

- Must have completed Math 5
- MCPS C2.0 AIM
- Must have completed compacted Math 5/6 or Math 6

6th Grade	7th Grade	8th Grade
LZ Math 6	LZ Math 7	LZ Math 8
LZ Math 6	MCPS C2.0 IM	Algebra 1
MCPS C2.0 AIM	Algebra 1	Hon Geometry

- The kindergarten through Grade 6 mathematics program contains acceleration and enrichment options that challenge students beyond the CCSS.
- Students who need support in the grade-level course may need to work in other courses in Middle School such as Math 180 or Math support.
- Students taking these classes will still be on a trajectory for Algebra 2 and higher-level math that prepares them for college. It is anticipated that these courses will phase out over time as more students reach proficiency in grade-level standards.

**SHADY GROVE MIDDLE SCHOOL
MIDDLE SCHOOL REFORM PATHWAY B- ENGINEERING**

**SHADY GROVE MIDDLE SCHOOL
MIDDLE SCHOOL REFORM PATHWAY B- ENGINEERING**

SIXTH GRADE

Engineering & Robotic Design



SEVENTH GRADE

Computer-Aided Drafting & Design w/
Applied Robotic Engineering (CADD-ARE)



EIGHTH GRADE

Satisfies the Tech Ed credit for high school graduation

Introduction to Engineering Design (IED)



NINTH- TWELFTH GRADE (Magruder High School)

Optional enrollment

Project Lead the Way Program