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# MCPS MONTGOMERY COUNTY PUBLIC SCHOOLS

# Middle School Magnet Consortium



- ARGYLE
- LOIEDERMAN
- PARKLAND





Middle School Magnet Consortium (MSMC)
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**Note:** School programs and other information contained in this publication are subject to change. Questions? Contact the schools.







#### Goals

The Middle School Magnet Consortium (MSMC) was created through a \$7.2 million grant from the United States Department of Education that ended with the 2007–2008 school year. Montgomery County Public Schools (MCPS) has adapted the goals established by the grant to meet current system needs. The MSMC goals are to—

- increase student performance in the three target schools
- broaden local student program choices and expand student program choices in MCPS
- reduce socioeconomic isolation in the three target schools without increasing socioeconomic isolation in the sending middle schools

#### Vision

MSMC staff believes-

- academic rigor is necessary preparation for the knowledge-based economy
- curiosity, the basis of the human desire to learn, must be developed and preserved
- all students benefit from caring, clear, and consistent adult guidance
- middle school is the time to gain the skills and knowledge for high school, college, and life

#### Milestones

Middle School Magnet Consortium students keep track of their educational progress through grades and assessments in their coursework. They also track their progress through several milestone achievements each year that span the skills and knowledge of the disciplines. MSMC schools have developed milestones for each grade level in the following categories:

- writing
- research
- problem solving
- presentation skills
- magnet area of focus

#### Common Elements

A primary goal of the Middle School Magnet Consortium is to increase student capacity for higher-level instruction in middle school and for advanced study in high school. Several common elements in the three schools have been established to ensure a consistently high level of rigor for students.

#### Accelerated Core Curriculum

Though each Consortium school has a distinct instructional focus, the academically rigorous accelerated core curriculum promotes high school and college preparation for students. Montgomery County Public Schools has developed a program of studies that provides students with earlier access to challenging courses. Students in MSMC schools have the opportunity to earn credit for some high school courses by the end of Grade 8.

#### Specialized Courses and Extended Learning Opportunities

The distinct instructional focus of each magnet school provides a content-based structure for the curriculum at each school. Interdisciplinary connections are formed around the concepts, content, and thought processes of the school's instructional focus. In addition, every student has the opportunity to take specialized courses in the school's area of focus. (See each school's description for specific examples).

Each school offers after-school opportunities such as academic coaching and support in the core curriculum. Clubs and other after-school activities are related to the school's instructional focus. Summer programs linked to the school's theme will be offered if the MCPS budget permits.

#### Highly Effective Instructional Program

MSMC schools provide professional development for teachers and extended learning opportunities for students to create a rigorous instructional program at each Consortium school. Professional development and team planning time for teachers is provided within the school day. Professional development centers around helping students reach their highest potential in the accelerated core curriculum and specialty courses. The magnet coordinator and staff development teacher at each school help coordinate the professional development for teachers and extended learning opportunities for students.

#### Collaborative Partnerships

MSMC schools have established partnerships with business and community organizations to support the instructional focus of each school. Examples of successful MSMC collaborative relationships include the following partnerships:

- Argyle and Passion for Learning, Montgomery County Parks and Recreation, and the National Park Service
- Loiederman and the Music Center at Strathmore, Baltimore Symphony Orchestra, and Roundhouse Theatre
- Parkland and the Civil Air Patrol, the Clark School of Engineering—University of Maryland, and Wheaton High School Academies of Bioscience and Engineering

In addition, each school works closely with parents to strengthen school-home partnerships.



# MIDDLE SCHOOL MAGNET CONSORTIUM OVERVIEW



THE MIDDLE SCHOOL MAGNET CONSORTIUM (MSMC) is made up of three schools—Argyle, Loiederman, and Parkland middle schools—each offering an innovative and challenging magnet curriculum. Argyle focuses on advanced computer science, Loiederman offers a creative and performing arts focus, and Parkland provides students the opportunity to explore mathematics and science through aerospace technology and robotic engineering. All three schools offer advanced mathematics.



### ARGYLE MAGNET SCHOOL for Digital Design and Development

Advanced Computer Science • Advanced Mathematics • Digital Design and Gaming 2400 Bel Pre Road, Silver Spring, Maryland 20906

Argyle students specialize in a rigorous computer science and digital design program that focuses on community or global problem-solving. Every Argyle student has the unique opportunity to—

- explore a variety of technologies such as mobile application development, video gaming production, programming artificial intelligence, digital multimedia production, web design development, and robotics
- experience a rigorous academic program with an emphasis on interdisciplinary project-based assessments that are enhanced by technology tools
- work with staff and peers to compete in technology problem-solving challenges in video game creation, robotics, art, and animation



# A. MARIO LOIEDERMAN MAGNET SCHOOL for the Creative and Performing Arts

Advanced Arts • Advanced Mathematics 12701 Goodhill Road, Silver Spring, Maryland 20906

Loiederman students specialize in creative and performing arts. Every Loiederman student has the unique opportunity to—

- explore a broad variety of art forms and develop specific talents and interests in the arts
- experience the creative environment of a rigorous arts program
- work with peers, artists, arts organizations, media outlets, and museums to produce live and multimedia performances



### PARKLAND MAGNET SCHOOL for Aerospace Technology

Advanced Mathematics and Science • Engineering 4610 West Frankfort Drive, Rockville, Maryland 20853

Parkland students specialize in a rigorous science and technology program focused on the problem-solving requirements of aerospace and robotic engineering. Every Parkland student has the unique opportunity to—

- explore technology solutions in aerospace, satellite, and robotic engineering
- experience a rigorous scientific engineering environment involving team problem solving and research
- work with peers to compete in NASA and other aerospace related challenges

# ARGYLE MAGNET SCHOOL

2400 Bel Pre Road, Silver Spring, Maryland 20906 301-460-2400

### DIGITAL DESIGN AND DEVELOPMENT Advanced Computer Science Advanced Mathematics Digital Design and Gaming

#### Goal

Argyle Magnet School for Digital Design and Development offers students in Grades 6, 7, and 8 a rigorous academic program focused on the development and application of computer science and digital design. All students take comprehensive technology courses based on national technology standards. Students may choose to take elective courses specializing in digital art and animation, multimedia production, gaming, programming, or web development.

# WHAT IS SPECIAL ABOUT ARGYLE MAGNET SCHOOL?

#### Walk into a building where students...

- express their creativity by designing authentic technology products
- use technology as an everyday tool for learning
- collaborate with technology experts in education and the world of work using the latest technology to produce video games, mobile applications for cell phones, graphic art, videos, and website design
- learn through hands-on experiences
- collaborate with peers and teachers to conduct research, solve problems, and share ideas
- use mobile technology to complete projects
- research and explore high school, post-secondary, and career options

# IS ARGYLE MAGNET SCHOOL FOR YOU? Do you like...

- using the latest technology to produce video games, mobile applications for cell phones, videos, and animations?
- telling a story through pictures, video, and music?
- creating your own computer programs and developing those programs into commands for robots?
- designing web pages?
- creating digital music and digital art?
- using technology as a problem-solving tool?
- competing in national video game and robotic competitions?
- developing mobile technology in different places throughout the building to produce projects that solve a real problem in a community?
- participating in a wide variety of free or low cost magnet related after-school programs?

#### Extended Learning Opportunities

Argyle offers a variety of extended learning opportunities after school, including academic coaching and support in the core curriculum. Computer science related after-school clubs may include such offerings as photography, computer art, yearbook, web design, animation, video gaming, and robotics. Summer programs related to the school's theme will be offered if the MCPS budget permits.

#### Milestones

As part of the MSMC, Argyle Magnet School for Digital Design and Development helps students achieve milestones in their education. Argyle staff work together to finalize milestones and magnet outcomes each year. Examples of milestones are listed below.

#### Grade 6

- **WRITING:** Write and refine a well-developed multiparagraph essay.
- **PRESENTATION SKILLS:** Deliver a three to five minute speech.
- **PROBLEM SOLVING:** Solve a problem with set parameters and known variables.
- **RESEARCH:** Develop a guided research project.
- **MAGNET FOCUS:** Create an on-going electronic portfolio of student work.

#### Grade 7

- **WRITING:** Write a persuasive essay about the ethical use of technology.
- **PRESENTATION SKILLS:** Deliver a presentation on the use of technology.
- **PROBLEM SOLVING:** Solve an open-ended problem.
- **RESEARCH:** Develop an interdisciplinary milestone project.
- MAGNET FOCUS: Develop an original product demonstrating reflection and growth in the chosen technology strand.

#### Grade 8

- **WRITING:** Write and refine an original work reflecting on the past, present, and future of technology innovation.
- **PRESENTATION SKILLS:** Deliver a presentation for a student-developed technology product.
- **PROBLEM SOLVING:** Develop a solution to a problem within a community.
- **RESEARCH:** Collaborate with a small business or non-profit to design a tech product.
- **MAGNET FOCUS:** Produce and refine an original product demonstrating reflection and growth in the chosen technology strand.

# DIGITAL DESIGN AND DEVELOPMENT

	GRADE	GRADE	GRADE
English	<ul> <li>Advanced English 6</li> <li>English 6</li> <li>Reading 6</li> <li>Read 180</li> </ul>	<ul> <li>Advanced English 7</li> <li>English 7</li> <li>Reading 7</li> <li>Read 180</li> </ul>	<ul> <li>Advanced English 8</li> <li>English 8</li> <li>Reading 8</li> <li>Read 180</li> </ul>
Mathematics	<ul> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> <li>Math 6</li> </ul>	<ul> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> </ul>	<ul> <li>Honors Algebra 2* A/B</li> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> </ul>
Social Studies	• Advanced World Studies 6	• Advanced World Studies 7	• Advanced U.S. History 8
Science	• Investigations in Science 6	• Investigations in Science 7	• Investigations in Earth/Space Systems
World Languages	• Spanish 1* A/B	<ul> <li>Spanish 1* A/B or 2* A/B</li> <li>Spanish for Spanish Speakers 1* A/B</li> </ul>	• Spanish 1* A/B, 2* A/B, or 3* A/B
W Lang		two or three years of a high school fo n language concentration in high scho	

#### Students can choose from a range of courses in the accelerated core curriculum...

\*High school credit upon successful completion of course and passing grade on final examination.

#### ...and a range of Argyle Magnet School specialty and advanced courses in technology.

	GRADE	GRADE 7	GRADE
Technology Electives	<ul> <li>Information and Communication Technology 6</li> <li>Video Game Production and Robotics (co-enrollment in Math 7 or above required)</li> </ul>	<ul> <li>Computer Art (year)</li> <li>Web Development Fundamentals (year)</li> <li>Lights, Camera, Literacy</li> <li>Gaming and Robotics (co-enrollment in Math 7 or above required)</li> <li>Discovering Programming</li> <li>Innovative Minds</li> <li>Designing Technology Solutions</li> </ul>	<ul> <li>Computer Art (year)</li> <li>Foundations of Art A/B (year)*</li> <li>Web Development Fundamentals (year)</li> <li>Website Development A/B (year)*</li> <li>Programming Fundamentals (year)</li> <li>Discovering Programming Concepts A/B (year)*</li> <li>Innovative Minds Two</li> <li>Gaming and Robotics (co-enrollment in Math 7 or above required)</li> <li>Designing Technology Solutions</li> </ul>
Other	<ul><li>PE/Health (required)</li><li>Band</li><li>Orchestra</li><li>Guitar</li></ul>	<ul> <li>PE/Health (required)</li> <li>Chorus</li> <li>Band</li> <li>Orchestra</li> <li>Guitar</li> </ul>	<ul> <li>PE/Health (required)</li> <li>Chorus</li> <li>Band</li> <li>Orchestra</li> <li>Guitar</li> </ul>
School Events	• Schoolwide, county, and state expos	and competitions as well as other events th	at may become available.

\* High school credit upon successful completion of course and passing grade on final examination.

# ARGYLE MAGNET SCHOOL

Students at Argyle Magnet School take core technology courses that are connected by concepts and skills to their mathematics, science, social studies, and English courses. Students may take advanced technology options, choosing to specialize in programming, digital media, web development, digital art, or courses specializing in technology.

#### Each year Argyle students MUST take a course in—

- English
- Mathematics
- Science
- Social Studies
- Technology
- Physical Education/Health

#### and choose additional courses from—

- Technology Electives
  - Gaming and Robotics
  - Digital Media Production
  - Web Development
  - Innovative and Designing Technology Solutions
- Reading
- World Languages
- Art
- Music



## What will a student schedule look like?

Argyle Magnet School uses an innovative block schedule. Students have four classes one day and four different classes the next day. These days alternate throughout the week. A student may have a schedule like the one below.

	Day A		Day B
Period 1	Advanced English 6	Period 2	Advanced World Studies 6
Period 3	Information and Communication Technology 6	Period 4	Video Game Production and Robotics
Lunch		Lunch	
Period 5	Algebra 1* A/B	Period 6	Investigations in Science 6
Period 7	Spanish 1* A/B	Period 8	Physical Education/Health

\*High school credit upon successful completion of course and passing grade on final examination.



# A. MARIO LOIEDERMAN MAGNET SCHOOL

12701 Goodhill Road, Silver Spring, Maryland 20906 301-929-2282

### CREATIVE AND PERFORMING ARTS Advanced Arts Advanced Mathematics

#### Goal

A. Mario Loiederman Magnet School for the Creative and Performing Arts offers students in Grades 6, 7, and 8 a rigorous academic program focused through the creative and performing arts. Students have the opportunity to take a comprehensive arts course in Grade 6, and may choose to take high level arts electives in the areas of digital and visual arts, dance, film, theatre, and music.

# WHAT IS SPECIAL ABOUT LOIEDERMAN MAGNET SCHOOL?

#### Walk into a building where students...

- grow academically and artistically on a daily basis
- pursue their dreams by crafting, creating, designing, and performing
- are encouraged to think creatively within all academic disciplines
- collaborate with artists to learn from existing works and to construct new masterpieces
- access multiple art, theatre, dance, and music spaces designed as dynamic learning environments
- display and perform works of art, music, drama, and dance
- start with the premise, "What if?" and work to answer the question, "Why not?"

# IS LOIEDERMAN MAGNET SCHOOL FOR YOU?

#### Do you like...

- singing, dancing, or playing an instrument?
- acting, speaking, or reciting?
- drawing, painting, or sculpting?
- learning through movement?
- discovering how the arts, history, and literature connect the human experience?
- working behind the scenes at professional or student performances?
- learning from teachers as artists and artists as teachers?

#### Extended Learning Opportunities

A. Mario Loiederman offers a variety of extended learning opportunities after school, including academic coaching and support in the core curriculum. Students at Loiederman may also choose to participate in afterschool arts related offerings such as Dance Company, Show Choir, Drama Club, and Junior Art Honor Society. Summer programs linked to the school's theme will be offered if the MCPS budget permits.

#### Milestones

As part of the MSMC, Loiederman Magnet School for the Creative and Performing Arts helps students achieve milestones in their education. Loiederman staff work together to finalize milestones and magnet outcomes each year. Examples of milestones are listed below.

#### Grade 6

- **WRITING:** Write an original, multi-paragraph adventure story.
- **PRESENTATION SKILLS:** Memorize and deliver a monologue in the character of a famous person.
- PROBLEM SOLVING: Solve a problem with set parameters and known variables.
- **RESEARCH:** Examine and reproduce artworks in the genre and style of different cultures.
- **MAGNET FOCUS:** Create an original work that is reviewed by peers and teachers.

#### Grade 7

- **WRITING:** Write an extended constructed response explaining how the development of individual student identity can be influenced by experiences as an actor, dancer or musician.
- **PRESENTATION SKILLS:** Perform a scripted or original dialogue.
- PROBLEM SOLVING: Solve an open-ended problem.
- **RESEARCH:** Develop a guided research project.
- **MAGNET FOCUS:** Develop an original piece or performance demonstrating reflection and growth in the chosen art form.

#### Grade 8

- **WRITING:** Write a multi-paragraph essay comparing an anchor text to a piece of art.
- **PRESENTATION SKILLS:** Perform a scripted or original scene.
- **PROBLEM SOLVING:** Solve complex open-ended problems.
- **RESEARCH:** Research the contributions and impact of an artist, art movement, or art form on a culture.
- **MAGNET FOCUS:** Produce and refine an original piece or performance demonstrating reflection and growth in the chosen art form.

# CREATIVE AND PERFORMING ARTS

#### Students can choose from a range of courses in the accelerated core curriculum...

GRADE		GRADE	GRADE
	6	7	8
English	<ul> <li>Advanced English 6</li> <li>English 6</li> <li>Advanced Reading 6</li> <li>Reading 6</li> </ul>	<ul> <li>Advanced English 7</li> <li>English 7</li> <li>Reading 7</li> <li>Read 180</li> </ul>	<ul> <li>Advanced English 8</li> <li>English 8</li> <li>Reading 8</li> <li>Read 180</li> </ul>
Mathematics	<ul> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> <li>Math 6</li> </ul>	<ul> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> </ul>	<ul> <li>Honors Algebra 2* A/B</li> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Algebra Prep</li> </ul>
Social Studies	Advanced World Studies 6	• Advanced World Studies 7	• Advanced U.S. History 8
Science	• Investigations in Science 6	• Investigations in Science 7	• Investigations in Earth Space Systems
World Languages	Students are encouraged to take tw second foreign language concentra	<ul> <li>Spanish 1* A/B</li> <li>French 1* A/B</li> <li>vo years of a high school foreign language tion in high school.</li> </ul>	<ul> <li>Spanish 1* A/B, 2* A/B</li> <li>French 1* A/B, 2* A/B</li> <li>course, with the option of beginning a</li> </ul>

\*High school credit upon successful completion of course and passing grade on final examination.

#### ...and a range of Loiederman Magnet School specialty and advanced courses in the arts.

		GRADE	GRADE 7	GRADE
	Core Arts	• Perspectives in the Fine Arts	Students select a minimum of one fine arts course	<ul> <li>Students select a minimum of one fine arts course</li> </ul>
	Visual Art	Exploring Visual Art	<ul><li>Fundamentals of Visual Art</li><li>Digital Art</li></ul>	<ul> <li>Foundations of Art* A/B</li> <li>Fundamentals of Visual Art</li> <li>Digital Art</li> </ul>
ts	Theatre/ Film	Exploring Theatre	<ul><li>Fundamentals of Theatre</li><li>Lights! Camera! Literacy!</li></ul>	<ul> <li>Theatre 1* A/B</li> <li>Fundamentals of Theatre</li> <li>Lights! Camera! Literacy!</li> <li>Lights! Camera! Film Literacy!</li> </ul>
Fine Arts	Dance	<ul><li>Exploring Dance</li><li>Dance for Athletes</li></ul>	<ul> <li>Fundamentals of Dance</li> <li>Exploring Dance</li> <li>Beginning Choreography</li> <li>Dance for Athletes</li> </ul>	<ul> <li>Dance as Fine Art* 1/2</li> <li>Fundamentals of Dance</li> <li>Exploring Dance</li> <li>Beginning Choreography</li> <li>Dance for Athletes</li> </ul>
	Music	<ul> <li>Band 6</li> <li>Orchestra</li> <li>Chorus 6</li> <li>Beginning Band</li> </ul>	<ul> <li>Concert Band</li> <li>Orchestra</li> <li>Beginning Band</li> <li>Concert Choir</li> <li>Digital Music</li> </ul>	<ul> <li>Concert Band* A/B</li> <li>Concert Orchestra* A/B</li> <li>Beginning Band</li> <li>Beginning Orchestra</li> <li>Chorus 1* A/B</li> <li>Concert Choir</li> <li>Digital Music</li> </ul>
	Other	• PE/Health (required)	• PE/Health (required)	• PE/Health (required)
	School Events	• Juried exhibitions, adjudications, performances, musical theatre and artwork competitions, gallery openings and oth events may become available.		artwork competitions, gallery openings and other

\*High school credit upon successful completion of course.

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# A. MARIO LOIEDERMAN MAGNET SCHOOL

Students at Loiederman Magnet School have the opportunity to take a core arts course in Grade 6. This course, Perspectives in the Fine Arts, connects arts concepts and skills to their core academic classes such as English, reading, and social studies. Students may take advanced arts courses, choosing to specialize in visual arts, theatre, dance, or music.

#### Each year Loiederman students MUST take a course in—

- English
- Mathematics
- Science
- Social Studies
- Fine Arts
- Physical Education/Health

#### and choose additional courses from—

- Fine Arts Electives
  - Visual Arts
  - Theatre
- Dance
- Choral Music
- Instrumental Music
- Film
- Reading
- World Languages



## What will a student schedule look like?

Loiederman Magnet School uses an innovative rotating schedule. Students have six classes per day with rotating periods in order to see teachers at different times each day. A student choosing the visual arts strand may have a schedule like the one below.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>PERIOD 1</b>	<b>PERIOD 7</b>	<b>PERIOD 5</b>	<b>PERIOD 3</b>	<b>PERIOD 1</b>
Advanced English 6	Investigations in Science 6	Exploring Visual Art	Investigations in Mathematics	Advanced English 6
<b>PERIOD 2</b>	<b>PERIOD 8</b>	<b>PERIOD 6</b>	<b>PERIOD 4</b>	<b>PERIOD 2</b>
Perspectives in the Fine Arts	Physical Education/Health	Advanced World Studies 6	GT Reading	Perspectives in the Fine Arts
<b>PERIOD 3</b>	<b>PERIOD 1</b>	<b>PERIOD 7</b>	<b>PERIOD 5</b>	<b>PERIOD 3</b>
Investigations in Mathematics	Advanced English 6	Investigations in Science 6	Exploring Visual Art	Investigations in Mathematics
<b>PERIOD 4</b>	<b>PERIOD 2</b>	<b>PERIOD 8</b>	<b>PERIOD 6</b>	<b>PERIOD 4</b>
GT Reading	Perspectives in the Fine Arts	Physical Education/Health	Advanced World Studies 6	GT Reading
<b>PERIOD 5</b>	<b>PERIOD 3</b>	<b>PERIOD 1</b>	<b>PERIOD 7</b>	<b>PERIOD 5</b>
Exploring Visual Art	Investigations in Mathematics	Advanced English 6	Investigations in Science 6	Exploring Visual Art
<b>PERIOD 6</b>	<b>PERIOD 4</b>	<b>PERIOD 2</b>	<b>PERIOD 8</b>	<b>PERIOD 6</b>
Advanced World Studies 6	GT Reading	Perspectives in the Fine Arts	Physical Education/Health	Advanced World Studies 6

# PARKLAND MAGNET SCHOOL

4610 West Frankfort Drive, Rockville, Maryland 20853 301-438-5700

### AEROSPACE TECHNOLOGY Advanced Mathematics and Science Engineering

#### Goal

Parkland Magnet School for Aerospace Technology offers students in Grades 6, 7, and 8 a rigorous academic program focused through advanced and applied mathematics, science, and technology. All students take an interdisciplinary science and aerospace course each year and may choose to take an aerospace elective with the goal of taking a high school science course in Grade 8.

# WHAT IS SPECIAL ABOUT PARKLAND MAGNET SCHOOL?

#### Walk into a building where students...

- share a thirst for knowledge and discovery
- experience the thrill of working on real science and engineering challenges
- use mathematics to solve authentic aerospace problems
- conduct experiments in robotics that rival those faced by the Mars Rover
- work in teams to create products that solve engineering problems
- communicate scientific findings to peers and scientists
- design, build, and program robots to meet engineering challenges
- participate in a wide variety of magnet related extracurricular activities
- collaborate with scientists and engineers on a regular basis

# IS PARKLAND MAGNET SCHOOL FOR YOU? Do you like...

- learning about astronomy, robots, space exploration, satellites, and flight technology?
- experimenting with the latest technology and equipment?
- sharing the experience of competition with other students?
- inventing and explaining new ideas and technologies?
- solving engineering problems using scientific knowledge and equipment?
- collaborating with scientists and engineers to make authentic connections?

#### Extended Learning Opportunities

Parkland offers a variety of extended learning opportunities after school including academic coaching and support in the core curriculum. Aerospace related afterschool clubs may include such offerings as astronomy and robotics. Summer programs related to the school's theme will be offered if the MCPS budget permits.

#### Milestones

As part of the MSMC, Parkland Magnet School for Aerospace Technology helps students achieve milestones in their education. Parkland staff work together to finalize milestones and magnet outcomes each year. Examples of milestones are listed below.

#### Grade 6

- WRITING: Write and refine a well-developed multiparagraph essay.
- **PRESENTATION SKILLS:** Deliver an in-class explanation of a scientific finding or engineering solution.
- **PROBLEM SOLVING:** Solve a problem with set parameters and known variables.
- **RESEARCH:** Develop a guided and well-designed investigation.
- MAGNET FOCUS: Create an on-going electronic portfolio of student work.

#### Grade 7

- **WRITING:** Write a persuasive essay about a scientific or engineering topic.
- PRESENTATION SKILLS: Deliver a proposal for a scientific experiment or engineering project to solve a problem.
- **PROBLEM SOLVING:** Solve an open-ended problem.
- **RESEARCH:** Develop a guided research project.
- **MAGNET FOCUS:** Develop a scientific or engineering solution to a student generated topic.

#### Grade 8

- **WRITING:** Write a research paper about the scientific findings of a student generated, well-designed investigation.
- PRESENTATION SKILLS: Deliver a presentation of scientific findings for a science symposium or an engineering design challenge.
- **PROBLEM SOLVING:** Solve complex open-ended problems.
- **RESEARCH:** Research and develop a well-designed and outside-reviewed investigation.
- **MAGNET FOCUS:** Develop a scientific or engineering solution to a student generated topic with a mentor from the scientific community.

# AEROSPACE TECHNOLOGY

	GRADE	GRADE	GRADE
English	<ul><li>Advanced English 6</li><li>English 6</li><li>Reading 6</li></ul>	<ul> <li>Advanced English 7</li> <li>English 7</li> <li>Reading 7</li> </ul>	<ul> <li>Advanced English 8</li> <li>English 8</li> <li>Reading 8</li> </ul>
Mathematics	<ul> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> <li>Math 6</li> </ul>	<ul> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Investigations in Mathematics</li> <li>Math 7</li> </ul>	<ul> <li>Honors Algebra 2* A/B</li> <li>Honors Geometry* A/B</li> <li>Algebra 1* A/B</li> <li>Algebra Prep</li> </ul>
Social Studies	• Advanced World Studies 6	• Advanced World Studies 7	• Advanced U.S. History 8
World Languages		<ul> <li>Chinese 1A</li> <li>Chinese 1B*</li> <li>French 1 A/B*</li> <li>French 2 A/B*</li> <li>Spanish 1 A/B*</li> <li>Spanish 2 A/B*</li> <li>vo or three years of a high school fore language concentration in high school</li> </ul>	

#### Students can choose from a range of courses in the accelerated core curriculum...

\*High school credit upon successful completion of course and passing grade on final examination.

#### ... and a range of Parkland Magnet School specialty and advanced courses in science.

	GRADE	GRADE	GRADE
Core Science	• Mission Planet Earth	<ul><li>Advanced Human Space Exploration</li><li>Human Space Exploration</li></ul>	<ul> <li>Honors Physics* A/B</li> <li>Investigations in Earth Space Systems</li> </ul>
Core Aerospace	<ul> <li>Advanced Comparative Planetology &amp; Orbital Mechanics</li> <li>Comparative Planetology &amp; Orbital Mechanics</li> </ul>	Unmanned Space Exploration	• Aerospace Design and Technology
Magnet Electives	<ul> <li>Astronomy &amp; Space Exploration**</li> <li>Introduction to Robotic Systems**</li> </ul>	<ul> <li>Research in Astronomy**</li> <li>Applied Robotic Programming**</li> <li>Applied Robotic Engineering**</li> <li>Principles of Flight**</li> </ul>	<ul> <li>Research in Astronomy**</li> <li>Introduction to Engineering Design* A/B</li> <li>Principles of Flight**</li> </ul>
Other Electives	<ul> <li>PE/Health (required)</li> <li>Band</li> <li>Orchestra</li> <li>Art 6**</li> <li>Introduction to Computers**</li> <li>Guitar 1</li> </ul>	<ul> <li>PE/Health (required)</li> <li>Band</li> <li>Orchestra</li> <li>Art 7**</li> <li>Introduction to Computers**</li> <li>Computer Applications**</li> <li>Guitar 1 or 2</li> </ul>	<ul> <li>PE/Health (required)</li> <li>Band</li> <li>Orchestra</li> <li>Specialty Art A** or B**</li> <li>Computer Applications**</li> <li>Guitar 1 or 2</li> </ul>
School Events	• Presentations at science fairs and conf other events that may become availab	erences, team problem solving and Space I le.	Day competitions, robotics challenges and

\*High school credit upon successful completion of course and passing grade on final examination. \*\*Course is one semester in length. Students may enroll in up to two of these courses.

# PARKLAND MAGNET SCHOOL

Students at Parkland Magnet School take core science courses that are connected by concepts and skills to their mathematics, science, social studies, and English courses. Students may take advanced science options courses, choosing to accelerate in the field of aerospace science.

#### Each year Parkland students MUST take a course in—

- English
- Mathematics
- Social Studies
- Core Science
- Core Aerospace
- Physical Education/Health

#### and choose additional courses from—

- Science Electives
  - Robotics
  - Flight
  - Astronomy
  - Engineering
- Reading
- World Languages
- Art
- Computers
- Music



### What will a student schedule look like?

Parkland Magnet School uses an innovative block schedule. Students have four classes one day and four different classes the next day. These days alternate throughout the week. A student may have a schedule like the one below.

	Day A		Day B
Period 1	Advanced English 6	Period 2	Advanced World Studies 6
Period 3	Mission Planet Earth	Period 4	Introduction to Robotics Systems (Sem 1) Astronomy and Space Exploration (Sem 2)
Lunch		Lunch	
Period 5	Algebra 1* A/B	Period 6	Advanced Comparative Planetology & Orbital Mechanics
Period 7	Spanish 1* A/B	Period 8	Physical Education/Health

\*High school credit upon successful completion of course and passing grade on final examination.



# **Choice Process Description**

*Choice* in the Middle School Magnet Consortium involves a lottery school assignment process for Grade 5 students.

#### In-Consortium

• Grade 5 students who live within the attendance area of Argyle, Loiederman, and Parkland will participate in the *Choice* process and be assigned to one of the three MSMC schools for Grade 6.

#### **Out-of-Consortium**

• Grade 5 students who live outside the MSMC attendance area in other parts of Montgomery County may participate in the *Choice* process.

In the fall of Grade 5, in-Consortium and interested out-of-Consortium students will participate in the process by completing a *Choice* form and ranking the three MSMC schools in order of preference. Factors in the lottery process may include the total number of available seats, choice ranking, sibling link, socioeconomic status, gender, and for out-of-Consortium students, the percentage of students on the Free and Reduced-price Meals System (FARMS) at the applicant's home school. Some students who are assigned to MSMC schools may receive an assignment other than their first choice.

### **Choice Forms**

In mid-October, a preprinted *Choice* form will be mailed to the homes of MCPS Grade 5 students who live within the Consortium boundaries. MSMC elementary students will return their completed form to their MSMC elementary school. (See page 12 for the list of MSMC feeder elementary schools).

In mid-October, *Choice* forms will be available for Grade 5 applicants who live outside the MSMC attendance area and are Montgomery County residents. *Choice* forms for out-of-Consortium applicants will be available on the website www.montgomery schoolsmd.org/schools/msmagnet/, at MCPS elementary schools, and from the Consortia office (301-592-2040). Forms must be submitted by the due date to the Division of Consortia Choice and Application Program Services (DCCAPS), 11721 Kemp Mill Road, Silver Spring, MD 20902.

### **Sibling Link**

Grade 5 students with a brother or sister who currently attends an MSMC school in Grade 6 or 7 are guaranteed assignment to the same MSMC school as the older sibling if the parent completes the sibling link section on the *Choice* form. Failure to complete this section may result in sibling assignment to different schools.

### **Choice Process Appeals**

A process is in place for parents with a unique verifiable hardship to appeal their child's school assignment. The reasons for the appeal must be clearly documented in writing. The first level of appeal is administered by the Division of Consortia Choice and Application Program Services. The second level of appeal is administered by the Office of the Chief Operating Officer, Montgomery County Public Schools.

### **Change of Choice**

In February, parents of Grade 6 MSMC students who wish to request a change of MSMC school for the following school year may complete a Change of Choice request form. Current Grade 7 students are not eligible to participate in the process due to sequencing of courses in the magnet focus. Change of Choice request forms will be available in early February at all three MSMC school counseling offices. The Change of Choice process considers a variety of factors when reassigning students to schools. These factors include the number of available seats. socioeconomic status, and gender. If a Change of Choice request is denied, the parent may appeal the decision in writing, as described above.

# **Choice Process Timeline**

September/ October	<ul> <li>Middle School Magnet Consortium (MSMC) information flyer mailed to homes of MCPS Grade 5 students.</li> <li>Evening MSMC information meetings held at two high schools. For details, visit the website www.montgomeryschoolsmd.org/schools/msmagnet/.</li> </ul>		
<ul> <li>Evening Open Houses held at Argyle, Loiederman, and Parkland middle schools.</li> <li>Choice forms mailed to homes of MCPS Grade 5 students who live within the MSMC bout</li> <li>Choice forms for interested Grade 5 students who are Montgomery County residents and I MSMC boundaries are available from the website www.montgomeryschoolsmd.org/school at elementary schools, and by calling the DCCAPS office at 301-592-2040.</li> <li>Evening student enrollment held for parents of current private school and home schooled Montgomery County residents. Call 301-592-2040 to schedule an appointment.</li> </ul>			
Round			
November	Choice forms due.		
February	Notification letters mailed to homes of Round 1 participants.		
Round 2	2 and Change of Choice		
February	<ul> <li><i>Choice</i> forms due from new in-Consortium Grade 5 students and from interested out-of-Consortium students who did not participate in Round 1.</li> <li>Letters due to DCCAPS office from parents of students who did not receive their first choice school and are requesting that their original <i>Choice</i> form be resubmitted in Round 2.</li> <li><i>Change of Choice</i> request forms due to DCCAPS office from parents of current MSMC Grade 6 students requesting assignment to a different MSMC school for the next school year. (See page 11 for details). Forms available in early February from MSMC school counseling offices.</li> </ul>		
March	• Notification letters mailed in late March to homes of Round 2 and Change of Choice participants.		
Appeals	5		
April	• Letters of appeal due to DCCAPS office from parents of students appealing the school assignment decision.		

**Note:** For further information about the Middle School Magnet Consortium, visit the website *www.montgomeryschoolsmd.org/ schools/msmagnet/* or contact the Division of Consortia Choice and Application Program Services (DCCAPS) at 301-592-2040. The DCCAPS office is located at 11721 Kemp Mill Road, Silver Spring, MD 20902.

# **Transportation to MSMC Schools**

#### **In-Consortium**

In-Consortium students who live beyond the MCPS designated walking distance of their assigned MSMC school are provided transportation from neighborhood bus stops. Walking distance is determined by MCPS and is approximately 1.5 miles for middle school students. Bus routes will be established in the summer, after *Choice* assignments are made. In-Consortium students live within the following elementary school boundaries:

#### **MSMC Feeder Elementary Schools**

Bel Pre	Harmony Hills	Viers Mill
Brookhaven	Sargent Shriver	Weller Road
Georgian Forest	Strathmore	Wheaton Woods

#### **Out-of-Consortium**

Parents of accepted students who live in all other areas of Montgomery County must provide their own transportation to MSMC schools.

## FREQUENTLY ASKED QUESTIONS

# What is the magnet focus at each Middle School Magnet Consortium (MSMC) school?

- Argyle Magnet School for Digital Design and Development has an emphasis on advanced computer science and digital design.
- Loiederman Magnet School for the Creative and Performing Arts has an emphasis on advanced arts.
- Parkland Magnet School for Aerospace Technology has an emphasis on advanced science and engineering.

# Which MSMC schools offer advanced mathematics classes?

All three MSMC schools offer advanced mathematics courses through Honors Algebra 2.

#### Who participates in the MSMC Choice Process?

- Grade 5 students who live within the attendance area of the three MSMC schools will participate in the *Choice* process and be assigned to one of the MSMC schools for Grade 6.
- Grade 5 students who live in other areas of Montgomery County may participate in the MSMC *Choice* process for Grade 6.
- Students in Grades 6-8 who move into MSMC neighborhoods during the school year will participate in the *Choice* process and be assigned to one of the MSMC schools for the current year.

#### Will current Grade 6 students who live outside the Consortium area have the opportunity to participate in the MSMC *Choice* process for the next school year?

Current Grade 6 students may participate in the *Choice* process. Factors that may be considered in the process include the total number of available seats, total number of applicants for those seats, choice ranking, sibling link, socioeconomic status, gender, and the percentage of students on the Free and Reduced-price Meals System (FARMS) at the applicant's home school. Some students who are invited to MSMC schools may receive a school assignment other than their first choice. Students currently in Grade 7 are not eligible to participate in the *Choice* process for the next school year due to sequencing of courses in the school's magnet focus.

# Which students are provided transportation to MSMC schools?

Transportation is provided for students who live within the MSMC attendance area and beyond walking distance of their assigned MSMC school. Walking distance is determined by MCPS and is approximately 1.5 miles for middle school students. Parents of accepted students who live in all other areas of Montgomery County must provide their own transportation to MSMC schools.

#### When and where will Choice forms be available?

- *Choice* forms will be available in mid-October.
  - MCPS Grade 5 students who live within the MSMC area will receive a preprinted *Choice* form by mail. (See MSMC feeder elementary schools on page 12).
  - Parents of Grade 5 students who live in other areas of Montgomery County will be able to obtain a *Choice* form from the website *www.montgomeryschoolsmd.org/schools/msmagnet/*, at elementary schools, or by calling the DCCAPS office at 301-592-2040.

#### When and where will Choice forms be due?

- *Choice* forms are due in early November. The due date will be indicated on the form.
  - All Grade 5 students who attend MSMC feeder elementary schools (see page 12) will return their *Choice* form to their current elementary school.
  - *Choice* forms for all other Grade 5 applicants must be mailed or delivered by the due date to the DCCAPS Office, Spring Mill Field Office, 11721 Kemp Mill Road, Silver Spring, MD 20902.

# What criteria will be used for selecting students who live outside the Consortium?

No test is required for admission to MSMC schools. A variety of factors are considered when selecting students for MSMC schools. Factors in the lottery process may include the total number of available seats, total number of applicants for those seats, choice ranking, sibling link, socioeconomic status of the applicant, gender of the applicant, and the percentage of students on the Free and Reduced-price Meals System (FARMS) at the applicant's home school. No one factor determines whether a student is invited to attend one of the three schools. Some students who are invited to MSMC schools may receive a school assignment other than their first choice.

# How are in-Consortium students who do not complete a *Choice* form assigned to an MSMC school?

In-Consortium students who do not complete a *Choice* form will be assigned to an MSMC school based upon available number of seats, socioeconomic status, and gender.

# HIGH SCHOOL OPTIONS

# What high school options are available to students who complete middle school in the Middle School Magnet Consortium?

Grade 8 students who attend Argyle, Loiederman, and Parkland magnet schools have a wide range of high school options to consider.



#### Grade 8 students who live within the Downcounty Consortium (DCC) attendance area

(See the list below of elementary school neighborhoods located in the DCC).

• will participate in Round 1 of the DCC high school *Choice* process and will rank the five DCC high schools in order of preference.

#### Grade 8 MSMC students who live outside the Downcounty Consortium attendance area

• may participate in Round 2 of the DCC high school *Choice* process for assignment to a DCC high school.

OR

• may elect to attend their home high school, the high school to which they would traditionally be assigned based on their home address.

#### High Schools in the Downcounty Consortium

The five DCC high schools are Montgomery Blair, Albert Einstein, John F. Kennedy, Northwood, and Wheaton. Each of these schools provides a comprehensive high school curriculum, clubs, activities, and athletics, plus academies that meet the interests of students and prepare them for college and future careers. (See the list of academies on page 15).

Grade 8 students who live within the attendance boundaries of the Downcounty Consortium will participate in Round 1 of the DCC high school *Choice* process. In October, a *Choice* form will be mailed to students' homes. Students and their parents will rank the five high schools in order of preference and submit the form by the November due date.

Grade 8 MSMC students who live outside the attendance boundaries of the Downcounty Consortium may participate in Round 2 of the DCC high school *Choice* process. In January, a *Choice* form will be mailed to their homes. These students and their parents can participate in the process by ranking the five high schools in order of preference and submitting the form to their MSMC middle school by the February due date.

Visit the website *www.montgomeryschoolsmd.org/schools/downcounty/* or call the DCCAPS office at 301-592-2040 for more information.

### **Elementary School Neighborhoods in the Downcounty Consortium (DCC)**

The elementary school neighborhoods listed below are part of the Downcounty Consortium. Grade 8 students who live in these neighborhoods will participate in Round 1 of the DCC high school *Choice* process.

- Bel Pre
- Brookhaven
- East Silver Spring
- Forest Knolls
- Georgian Forest
- Glenallan
- Glen Haven

- Harmony Hills
- Highland
- Highland View
- Kemp Mill
- Montgomery Knolls
- New Hampshire Estates
- Oak View

- Oakland Terrace
- Pine Crest
- Piney Branch
- Rock View
- Rolling Terrace
- Sargent Shriver
- Sligo Creek

- Strathmore
- Takoma Park
- Viers Mill
- Weller Road
- Wheaton Woods
- Woodlin

## DCC High Schools and Academies\*

#### Montgomery Blair High School

- Entrepreneurship & Business Management
- Human Service Professions
- International Studies & Law
- Media, Music & The Arts
- Science, Technology, Engineering & Math

#### Albert Einstein High School

- Finance, Business Management & Marketing
- International Baccalaureate (IB) Diploma Programme
- Renaissance
- Visual & Performing Arts

#### John F. Kennedy High School

- Business Management & Administration
- Health Careers
- International Baccalaureate (IB) Diploma Programme
- Media Communications
- Naval Junior Reserve Officer Training Corps (NJROTC)

#### Northwood High School

- Humanities, Art & Media
- Montgomery College Middle College at Northwood
- Musical Theatre
- Politics, Advocacy & Law
- Technology, Environmental & Systems Sciences
- Wheaton High School
  - Bioscience
  - Engineering
  - Global & Cultural Studies (Digital Art, Digital Music and Global Studies Pathways)
  - Information Technology

\*To learn about the DCC high schools and academies, visit the website www.montgomeryschoolsmd.org/schools/downcounty/. Academies and courses are subject to change. For more information, contact the schools.



#### Grade 8 students who attend MSMC schools may apply to one or more of the high school applicationonly programs available to students who live within the DCC and/or attend DCC middle schools:

- Biomedical Program at Wheaton High School. Visit the website www.montgomeryschoolsmd.org/ schools/wheatonhs/ or call 301-929-2050 for information.
- **OPTION TWO**
- Communication Arts Program (CAP) at Montgomery Blair High School. Visit the website http:// *cap.mbhs.edu/* or call 301-649-2854 for information.
- Engineering Program at Wheaton High School. Visit the website www.montgomeryschoolsmd.org/ schools/wheatonhs/ or call 301-929-2050 for information.
- Leadership Training Institute (LTI) at John F. Kennedy High School. Visit the website www. montgomeryschoolsmd.org/schools/kennedyhs/programs/lti/index.aspx or call 301-962-5930 for information.



#### Grade 8 students who attend MSMC schools may apply to one or more of the countywide application-only programs available to MCPS students:

- International Baccalaureate (IB) Diploma Programme at Richard Montgomery High School
- Science, Mathematics, Computer Science Magnet Program at Montgomery Blair High School †
- Visual Art Center at Albert Einstein High School •
- Whole School Magnet Program at Poolesville High School
  - Global Ecology House
  - Humanities House‡
  - Science, Mathematics, Computer Science House‡

Visit the website www.montgomeryschoolsmd.org/curriculum/specialprograms/high/ or contact the individual high schools for information about each program.

- + Application program available to students who live within the high school clusters of Bethesda-Chevy Chase, Churchill, the Downcounty Consortium (Blair, Einstein, Kennedy, Northwood, and Wheaton), Rockville, Richard Montgomery, the Northeast Consortium (Blake, Paint Branch, and Springbrook), Sherwood, and Whitman.
- \* Application program available to students who live within the high school clusters of Clarksburg, Damascus, Gaithersburg, Magruder, Northwest, Poolesville, Quince Orchard, Seneca Valley, and Watkins Mill.



#### Grade 8 students who attend MSMC middle schools may apply to the countywide application-only career themed programs available at Thomas Edison High School of Technology (TEHST):

Once in high school, MCPS students may apply to TEHST for its half-day career and technology education programs. Accepted students attend TEHST for half the school day and their co-enrolled comprehensive high school for the remaining half day.

Visit the website www.montgomeryschoolsmd.org/schools/edison/ and/or contact the TEHST counseling office at 301-929-2181 for information about the programs.



Published by the Department of Materials Management for the Office of Curriculum and Instructional Programs

1150.13ct • Editorial, Graphics & Publishing Services • 12.13 • 1,500

