Parkland Magnet Middle School for Aerospace Technology Course Catalog 2024-2025 6th Grade



Administration

Mr. Aaron Shin, Principal Ms. Madhuri Tallapragada, Assistant Principal Mrs. Patricia Thompson, Magnet Coordinator

Counselors

Mrs. Amber Naulls, Resource Counselor
Ms. Lisa Estwick
Mrs. Juli Griffin-Gross
Mrs. Christina Newbill-Redmond
Mr. Ronald Schwartz

4610 West Frankfort Drive Rockville, MD 20853-2799 240-740-6800 – Main Office 240-740-6820 – Counseling Services

Parkland Magnet Middle School for Aerospace Technology



4610 West Frankfort Drive Rockville, Maryland 20853

Phone: 240-740-6800 Fax: 301-460-2699 Mr. Aaron Shin, Principal

Dear Students, Parents and Guardians:

It is with great pleasure that I welcome you to Parkland Magnet Middle School for Aerospace Technology for your 6th, 7th or 8th grade year. The registration process for the 2024 – 2025 school year is underway. This course booklet provides you with descriptions of the courses offered at Parkland, both academic and elective. You are encouraged to review this booklet as you discuss course selections for next year as well as planning for the remaining middle school years.

Our program of studies is constructed around a rigorous magnet program designed to assist every student in increasing their level of academic achievement and beginning high school studies. This all-school magnet program focused on aerospace, robotic engineering and astronomy, allows all students to benefit from the infusion of rigorous math and science curricula into real world and out of this world applications.

The students at Parkland are taught by caring, highly skilled teachers who are committed to providing rigorous opportunities for all children and continuous improvement for themselves and their students. Parkland is a school where every student is given equal opportunity to excel. We believe that academic rigor is a necessary preparation for the knowledge-based economy and that middle school is the time to gain the skills and knowledge for high school, college, and beyond.

Sincerely,

Mr. Aaron Shin

Principal

TABLE OF CONTENTS

GENERAL INFORMATION	3
Introduction	3
School Mission	3
Program Goals	3
Parkland's Unique Science Sequence	3
Registration Procedures	4
Scheduling Process/Course Availability	4
Changes to Course Requests	4
Counseling Department	4
Special Education Services	4
English Language Learners (ELL)	4
Advanced Level Courses	5
High School Credit for Middle School Courses	5
INSTRUCTIONAL PROGRAM PATHWAYS	6
6 th Grade Courses	7
Course Descriptions – 6 th Grade Required Courses	7
ENGLISH	7
MATHEMATICS	7
SCIENCE	8
AEROSPACE	8
SOCIAL STUDIES	8
PHYSICAL EDUCATION/HEALTH	8
READING AND WORLD LANGUAGES	9
Course Descriptions – 6 th Grade Elective Courses	10
AEROSPACE ELECTIVES	10
ART	10
DIGITAL LITERACY	10
MUSIC	11
THEATRE	11

GENERAL INFORMATION

Introduction

Parkland Magnet Middle 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. The program content is based on the goals and objectives of the MCPS curriculum, and is accelerated and compacted to allow students an opportunity to complete a high school science course by the end of Grade 8.

School Mission

At Parkland, we believe that every student regardless of socioeconomic status, ethnicity, past history and academic background will have access to opportunities for success socially and academically in our unique whole-school magnet program. We will provide the support necessary for every student to succeed. We believe...

"Every Student, Whatever It Takes!"

Program Goals

The goals of Parkland Magnet Middle School for Aerospace Technology are for all students to:

- Successfully complete a compacted and enriched middle school science curriculum by the end of Grade 7.
- Successfully complete high school Honors Physics or Geoscience by the end of Grade 8.
 - O Students choosing to take Physics in Grade 8 must complete Algebra I by the end of Grade 7
 - O Honors Geometry in Grade 8 is a co-requisite of Physics
- Successfully complete Investigations in Mathematics by the end of Grade 7.
- Successfully complete Algebra I by the end of Grade 8.
- Complete yearly milestones in the areas of technical writing, presentation, problem solving, and scientific and technological research.
- Engage rigorously in the process skills of science through real-world applications.
 - O Develop and design independently a testable question that includes analyzing and developing a well-designed procedure complete with independent and dependent variables.
 - O Collect, organize and display data in ways others can verify using appropriate instruments.
 - Analyze and summarize data to identify trends and form a logical argument about a cause and effect relationship or sequence of events.
- Demonstrate the ability to solve problems with technology using a systems approach, higher-level thinking skills, individual and collaborative ingenuity, and a variety of resources such as information, tools, and materials including choosing and using appropriate:
 - O Computer skills in applications and research (e.g. coding, applications, cybersecurity and safety)
 - o Measurement skills in science, math and technology (e.g. distance, mass, time)
 - O Tools of science and technology to solve problems (e.g. graphing calculators, scientific laboratory equipment, 3-D printer, engineering and robotics)
- Consistently produce quality pieces of technical writing.
 - o Conduct in-depth scientific research
 - O Prepare and write a research paper that incorporates an abstract
 - o Publish the writing piece as an authentic text
 - O Use factual evidence to formulate and support a conclusion
- Become independent, responsible self-learners who are self-advocates that seek out support when needed.

Parkland's Unique Science Sequence

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. At Parkland, we offer students an accelerated curriculum in the sciences in which the MCPS middle school science curriculum has been compacted into four courses over the Grade 6 and Grade 7 years. These courses include Mission: Planet Earth, Comparative Planetology & Orbital Mechanics, Human Space Exploration & Survival, and Unmanned Space Exploration. This compaction and acceleration allows students to enroll in a high school level science course for credit in Grade 8; Honors Physics if concurrently enrolled in Honors Geometry or Honors Algebra 2, or Earth Systems and Sustainability.

Registration Procedures

Use this program book as a guide to courses, programs, services and activities available at Parkland. Read this document thoroughly before making your course selections. Students and parents/guardians should work together to make course selections that best suit the interests and abilities of the student.

Students will be registering for courses in January. It is very important that all of the course request forms are returned by the due date.

Scheduling Process/Course Availability

All courses and electives are subject to cancellation if there is not sufficient student enrollment, staffing, or pending budget approval. Courses and electives with insufficient enrollment may not be offered. The counselors and administrative team will work diligently to create a schedule for each student that meets their academic needs and interests.

Changes to Course Requests

A copy of the students' course requests will be shared with students and parents/guardians after the initial registration period has occurred. At this time, if a student/parent requests a change or correction to their current course requests, they may return the form with indicated changes and a parent signature to the Counseling office. Students may not get their first choice of elective courses due to class enrollment and staff availability. Every effort will be made to provide the student with a comparable course choice.

After the 2024-2025 school year begins, schedule changes will only be made on an as needed basis such as an error in scheduling. Schedule changes are limited due to class enrollment and class availability.

Counseling Department

While at Parkland, students will be assigned to a counselor who will help 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 Parkland so that a positive and lasting relationship of support is maintained.

When working with a counselor, students may:

- Discuss personal and/or academic concerns
- Explore strengths, weaknesses, interests and aptitudes
- Reflect upon current responsibilities and future goals
- Develop strategies to become effective personally, socially, and academically
- Plan educational programs
- Address other pertinent issues

2024-2025 Counseling Staff

Amber Naulls – Resource Counselor, 6th Grade
Juli Griffin-Gross – 7th grade
Ron Schwartz – 8th grade
Christina Newbill-Redmond – 6th grade
Lisa Estwick – 7th/8th Grade
Alan Grenidge – Counseling Department Secretary & School Registrar

Special Education Services

Students with disabilities have varied Individualized Education Plans (IEP) 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 curriculum. Instruction is designed to incorporate strategies that will enable students to make reasonable progress on their IEP goals and manage the rigor of content across all subject areas. Parkland follows the instructional model of full inclusion, meaning students receiving special education services are enrolled in general education courses with additional instructional support included in the classroom. A continuum of services is offered. The IEP Team decisions about course selection overrides registration selections.

English Language Learners (ELL)

The ELL program provides support for non-native English speakers as they work to improve their American English speaking, listening, reading, writing and viewing skills. The program is broken into sequential levels with the goal of becoming proficient in English. Students in the ELL program will enroll in ELL classes or in an additional English class.

Advanced Level Courses

Advanced level courses provide opportunities for students to accelerate and enhance their learning experiences through exposure to advanced content, differentiated instruction, and ongoing assessment. Advanced courses follow the approved grade level curriculum using instructional and assessment strategies that cover course objectives in more depth and require greater use of abstract and higher-level thinking skills. In addition, students are expected to work independently and undertake rigorous research and writing projects. Parkland provides grade 6, 7 and 8 advanced instruction in four areas: English, mathematics, social studies, and science.

Students may be recommended for *Advanced* courses by teachers, parents, or by self-selection. The following criteria are considered in determining a student's placement in *Advanced* classes:

- Mastery of course prerequisites (Grade of A, B, or C)
- Standardized test scores, as appropriate
- Willingness to complete challenging assignments
- Teacher/counselor recommendations
- Parent/guardian recommendations
- Other appropriate measures such as work samples and portfolios

Advanced students are expected to maintain an 'A' or 'B' average in Advanced classes. Students who receive a grade of 'C' or lower at the end of the first marking period will be counseled about ways to improve their performance.

High School Credit for Middle School Courses

Grades and credit earned for high school courses taken in middle school will be included on the high school transcript, but the grade points will not be automatically calculated into the cumulative GPA unless requested by students and parents/guardians. Students and parents/guardians will be notified of procedures to opt into such courses in the cumulative GPA once they are in high school, no earlier than after the first semester of Grade 9 when a cumulative GPA has been established with multiple courses. This approach will help students and families see the impact of including such courses on the cumulative GPA once a greater sample of courses and grades has been established. Students and parents/guardians will also have the opportunity to hold off on making the request until at least Grade 11, so as to consider the full impact with multiple years of high school courses.

High school credit courses offered at Parkland include Algebra 1, Honors Geometry, Honors Physics, Earth Systems and Sustainability, Astronomy, French 1A, 1B, 1A/B, 2A/B, 3A/B, and Spanish 1A, 1B, 1A/B, 2A/B, 3A/B, Spanish for Spanish Speakers 1 and 2 (SSS), and Introduction to Engineering Design.

INSTRUCTIONAL PROGRAM PATHWAYS

* indicates student may earn high school credit

Grade 6	Grade 7	Grade 8
Required Courses: Advanced English 6 or English 6 and/or ELD 1, 2, 3, 4, or 5 Mathematics (Math 6, AMP6+, or AMP7+) History 6 (Historical Inquiry 6, Global Humanities) Physical Education/Health 6	Required Courses: Advanced English 7 or English 7 and/or ELD 1, 2, 3, 4, or 5 Mathematics (Math 7, AMP7+, Math 8, Alg. 1*) History 7 (Historical Inquiry 7, Global Humanities) Physical Education/Health 7	Required Courses: Advanced English 8 and/or ELD 1, 2, 3, 4, or 5 Mathematics (Math 8, Alg 1*, Honors Geometry*) History 8 (Historical Inquiry in US History 8, American Studies 8) Physical Education/Health 8
-AND-	-AND-	-AND-
Mission Planet Earth	Advanced Human Space Exploration & Survival	Honors Physics* (co-requisite - Honors Geometry)
	OR Human Space Exploration & Survival	OR Earth Systems & Sustainability*
-AND- Comparative Planetology & Orbital Mechanics	-AND- Unmanned Space Exploration	-AND- Aerospace Design & Technology
-AND-	-AND-	-AND-
<u>Electives</u>	<u>Electives</u>	<u>Electives</u>
World Language Options*: French 1A, French 1A/B, Spanish 1A, Spanish 1A/B, Spanish Literacy or Spanish for Spanish Speakers 1 (must be tested)	World Language Options*: French 1A, French 1A/B, 2A/B, 3A/B Spanish 1A, Spanish 1A/B, 2A/B, 3A/B Spanish Literacy or Spanish for Spanish Speakers 1 or 2 (must be tested)	World Language Options*: French 1A, French 1A/B, 2A/B, 3A/B Spanish 1A, Spanish 1A/B, 2A/B, 3A/B Spanish Literacy or Spanish for Spanish Speakers 1 or 2 (must be tested)
Option 1: Principles of Flight (sem) & Introduction to Robotic Systems (sem)	Option 1: Applied Robotic Engineering (sem) & Applied Robotic Programming (sem)	Option 1: Invent the Future (sem) & Student Court (sem)
Option 2: Art 6 (sem) & Coding and Robotics Design (sem)	Option 2: Applied Robotic Engineering (sem) & 3D Printing and Design (sem)	Option 2:Invent the Future (sem) & Coding (sem)
Option 3: Art 6 (sem) & Introduction to Robotics (sem)	Option 3: Applied Robotic Engineering (sem) & Forensics (sem)	Option 3: Coding (sem) & Student Court (sem) Option 4: Digital Art (sem) & Art (sem)
Option 4: Invent the Future (sem) & Coding and Robotics (sem)	Option 4: Forensics (sem) & 3D Printing and Design	Option 5: Digital Art (sem) & Theater (sem)
Option 5: Invent the Future (sem) Principles of Flight (sem) & Art 6 (sem)	Option 5: Forensics (sem) & Invent the Future	Option 6: Digital Literacy 3-Social Justice (year)
Option 6: Invent the Future (sem) & Art 6 (sem)	Option 6: Art 7 (sem) & Applied Robotic Program	Option 7: Astronomy (year)
Option 7: Digital Literacy 1-Creative	Option 7: Art 7 (sem) & Computer Science (sem)	Option 8: Introduction to Engineering Design (year)
Writing/Graphic Novels (year)	Option 8: Art 7/Theater 2 (sem)	Option 9: Middle School Theater 3 (year) (Must
Option 8: Art 6 (sem) & Theater 1 (sem)	Option 9: Digital Literacy 2-Myths/ Legends	have taken Theater 1 and/or 2)
Option 9: Beginning Band (year)	(year)	Option 10: Guitar (year)
Option 10: Beginning Orchestra (year)	Option 10: Guitar 1 or 2 (year)	Option 11: Intermediate or Advanced Band (year)
Option 11: Guitar 1 (year)	Option 11: Beginning or Intermediate or Advanced Band (year)	Option 11: Intermediate of Advanced Orchestra (year)
	Option 12: Beginning or Intermediate or Advanced Orchestra (year)	Option 12: Student Aide (year) (Counseling Services & Media Center)

Course Descriptions – 6th Grade Required Courses

ENGLISH

English 6

Students in English 6 examine language and literature in the context of four thematic units: Foundations, Adventures, Challenges & Barriers and Choices. Students read, analyze, and study different genres related to each of the themes and complete required common tasks. Anchor texts include multicultural, contemporary, and classic titles. The common tasks focus primarily on the writing process, highlighting the informative, persuasive, narrative and procedural intents. They include the use of information, word processing, and presentation technology to address a variety of language skills. Rigor and challenge are essential components of the instructional approach to English 6. Students have many opportunities to present their work orally and through the medium of technology. Instruction in reading and writing strategies, grammar and vocabulary is embedded in every unit. English 6 prepares students through activities integrated into each thematic unit for formal, county, state, and national assessments.

Advanced English 6

This course is designed for able and motivated students with a lively interest in the power and versatility of language. In preparation for advanced middle and high school English courses, students read challenging texts written in various time periods and rhetorical contexts. Students develop their ability to express ideas with clarity and precision by writing increasingly complex compositions for a variety of purposes, including literary analysis, persuasion, and research.

MATHEMATICS

Math 6

Curriculum 2.0 (C2.0) Math 6 extends students' understanding of whole number and fraction concepts developed throughout the elementary grades. Instruction at this level will focus on four areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Accelerated Math 6 Plus

The Accelerated Math 6 Plus (AMP6+) course begins with a study of area and surface concepts. This work sets the tone for later units that use area models for arithmetic using rational numbers. Next, students begin study of ratios, rates, and percentages with an introduction using representations such as number line diagrams, tape diagrams, and tables. Student understanding of these concepts expands by exploring fraction and decimal representations of rational numbers. They explore sums, differences, products, and quotients using intuitive methods and efficient algorithms. Further, students are introduced to equations and expressions including finding solutions for linear equations in one variable and basic equations involving exponents. Student understanding of ratios and rates combined with a basic understanding of equations leads students to study proportional relationships with special emphasis on circumference and area of a circle as an example and nonexample of proportional relationships. This is followed by looking at percentage concepts and applications such as sales tax, tipping, and markup. They learn about rational numbers less than zero expanding their understanding of arithmetic to negative numbers. A brief study of data and statistics concludes the new concepts in the course. The last unit offers students an optional opportunity to synthesize their learning from the year using a number of different applications.

Accelerated Math 7 Plus

The Accelerated Math 7 Plus (AMP7+) advanced course follows Accelerated Math 6 by including the remaining grade 7 standards and all grade 8 standards. In this course, students will study rigid transformations and congruence, scale drawings, similarity, and slope. Students will build upon their understanding of expressions and equations by learning how to represent relationships in different algebraic forms, writing equivalent expressions, solving one variable equations and inequalities, and begin the study of linear relationships. Students will also explore topics related to functions, volume, exponents and scientific notation, the Pythagorean Theorem, and irrational numbers.

SCIENCE

Mission Planet Earth

As we search for new life forms on Earth and in the universe, it is important for students to have a basic understanding of the requirements for life here on Earth. Students will gain an understanding of diversity and organism adaptations, energy flow, ecology and environmental issues including how humans impact local and global environments here on the Earth. Inquiry and laboratory investigations are an integral part of the program. Problem solving investigations are used continually to allow students to investigate authentic problems and reinforce science concepts. Units studied in *Mission: Planet Earth* include Life on Earth, Interactions of Living Things, Interactions of Living Things within their Environment and Human Impact on Earth's Environment.

AEROSPACE

Comparative Planetology & Orbital Mechanics

As we begin to study distant planets, it is important for us to understand the composition and structure of our own planet. Students will begin this study by first understanding Earth's place within the Universe, the Milky Way Galaxy and the Solar System. Students will then learn to understand the processes that shape the planets and the physical laws that govern the Universe. 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. Units studied in *Comparative Planetology & Orbital Mechanics* include the Solar System, Earth, Sun, and Moon, Processes that Shape the Planets and Exploring the Laws of the Universe.

SOCIAL STUDIES

Historical Inquiry 6

The content in 6th grade spans multiple continents exposing students to various cultures, governments, religions, and economies. In studying the different civilizations, students are able to analyze how civilizations changed over time and increased in complexity due to the evolving interactions with the surrounding geography and people in their region and beyond. This course prepares students for 7th grade World History.

PHYSICAL EDUCATION/HEALTH

Physical Education 6

Middle school students participate in a daily program of physical education that includes activities designed to challenge them to cooperate and compete while practicing teamwork, sports etiquette, cooperation, decision making, leadership, and communication. By the end of Grade 6, students should be able to do the following:

- Demonstrate basic strategic concepts and psychomotor skills in team and individual activities.
- Demonstrate competency in rhythmic and creative movement activities.
- Work as a member of a group to accomplish a common goal.
- Display positive behavior and apply appropriate decision-making skills.
- Participate in a variety of activities that can be applied to leisure activities throughout life.
- Set realistic fitness goals.

Health Grade 6

Comprehensive Health Education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy and lifelong wellness. The health skills emphasized throughout the program include analyzing influences, accessing information, interpersonal communication, decision-making, goal-setting, self-management, and advocacy. This nine-week course includes the following four units of instruction: mental and emotional health; alcohol, tobacco and other drugs; personal and consumer health and safety and injury prevention.

Course Descriptions – 6th Grade Reading and World Language Courses

READING

Students are recommended by the elementary school teacher if they need reading support. There are two course options for reading:

Read 180

An intensive reading intervention program designed to meet the needs of students whose reading achievement is below the proficient level. The program directly addresses individual needs through adaptive and instructional software, high-interest reading materials, and direct instruction in reading and writing skills.

Academic Literacy

A reading intervention program designed to meet the needs of struggling readers through differentiated instruction, computer adaptive instruction, background-knowledge-building videos, high interest literature, and explicit instruction in reading, writing, and vocabulary skills

WORLD LANGUAGES

The goal of the Parkland Magnet Middle School world language program is to educate students in a language and culture in order to make them knowledgeable and active members of a global society. Students will learn to use world languages for meaningful communication in both written and spoken form. The world language program emphasizes language as it is used in real life situations that they are likely to encounter. Through world language study, students develop sensitivity to the cultural and linguistic heritage of other groups and become prepared to participate in a society characterized by linguistic and cultural diversity. Middle school students that are not enrolled in reading are encouraged to enroll in a world language course. The languages available at Parkland are French, and Spanish. All world language courses are high-school level courses that include an Integrated Performance Assessment (IPA) at the end of the quarter. Successful completion of the course includes successfully passing both semesters of the course

Students interested in the International Baccalaureate Program at Richard Montgomery High School must be enrolled or have completed Level 1 or higher of French or Spanish by Grade 8. Native speakers of French or Spanish may be eligible without the Level 1 world language requirement.

French 1A or Spanish 1A (full year) (0.5 high school world language credit)

Students will be introduced to basic vocabulary and structures through developing communication skills to discuss the topics of greetings, school, food, personal information and family. Cultural perspectives and comparisons will be integrated. *This course is NOT recommended for native speakers or students with some experience with the language - please choose Level 1A/B or higher.* (by Teacher Recommendation)

French 1A/B or Spanish 1 A/B (full year) (1.0 high school world language credit)

Students will be introduced to basic vocabulary and structures in the language through developing communication skills to discuss the topics of greetings, personal information, pastimes, school, food, family, travel, community and clothing. Cultural perspectives and comparisons will be integrated. *This course is designed for students who can handle the faster and challenging high-school pace. Native speakers or students with some experience with the language will be tested and may be promoted to a higher level.* (by Teacher Recommendation)

Course Descriptions – 6th Grade Elective Courses

The options available are:

Option 1: Principles of Flight (sem) & Introduction to Robotic Systems (sem)

Option 2: Art 6 (sem) & Coding and Robotics Design (sem)

Option 3: Art 6 (sem) & Introduction to Robotics (sem)

Option 4: Invent the Future (sem) & Coding and Robotics (sem)

Option 5: Invent the Future (sem) Principles of Flight (sem) & Art 6 (sem)

Option 6: Invent the Future (sem) & Art 6 (sem)

Option 7: Digital Literacy 1-Creative Writing/Graphic Novels (year)

Option 8: Art 6 (sem) & Theater 1 (sem)

Option 9: Beginning Band (year)

Option 10: Beginning Orchestra (year)

Option 11: Guitar 1 (year)

AEROSPACE ELECTIVES

Principles of Flight (semester)

In this experience-based course, students will explore the principles of flight through the designing and building of model. Students will study the history of flight, types of aircraft, and aircraft design. Problem solving and critical thinking skills will be used to investigate real-world problems in aviation. Technical reading and writing skills will be integrated into the course to extend student understanding of flight.

Introduction to Robotic Systems (semester)

Introduction to Robotic Systems is an interactive, hands-on semester course that explores technology systems using robotics as a framework. The class examines the basics of structural, fluid and electrical systems and applies this knowledge to design and construct a working model of a 3-axis hydraulic robot. Principles of problem solving are introduced in the design phase and revisited during an introduction to the programming lab at the end of the semester. Machine tool use and safety is an integral part of this course.

Coding and Robotics Design – Grade 6 (semester)

This course provides students with active learning experiences related to Game Development, Design and Modeling, Robotics, and Design and Engineering. Course outcomes are based upon national and state technology standards.

Invent the Future with KID Museum (semester)

In this course students will experience a full invention process in order to answer the question: What will you make to protect life on this planet? Students will work through the Engineering Design Process -- defining a problem, developing solutions, building prototypes, testing and optimizing a solution, and communicating ideas -- all while working through failure and iterating on ideas. Throughout the course, students will attend a series of field trips with KID Museum to learn technical skills in coding, technology, fabrication, and engineering, and then they will use these skills to build an invention prototype.

ART

Art – Grade 6 (semester)

This course develops students' knowledge of line, color, shape, form, and texture during the creation of artworks using a variety of art materials. Students are exposed to art from other cultures and historical periods.

Students will begin to understand how artists use the elements of art and principles of design to design and create drawings, paintings, sculpture and crafts. Students will create artwork in an extended group project based on the school's aerospace theme. Students are taught the safe and proper use of art tools, materials, and the art room.

DIGITAL LITERACY 1

Creating Writing/Graphic Novel

Let your creative side shine in this course! Create your own characters! Create your own adventures! Create your own graphic novel! During the first semester, we will write short stories, plays, news stories, and blogs using an original character. We will also study writing samples from professional writers as well as student writers to guide student writing. Second semester, we will read graphic novels and use our artistic talents to create our own graphic novels.

MUSIC

If there is not sufficient student demand for a standalone beginning instrumental course, the class will be merged with an intermediate course. It is expected that students will rent or purchase an instrument to use in any instrumental music class. Students who qualify may contact the teacher to borrow an instrument. Due to issues of balancing the instrumentation within the band, students may be asked to switch instruments within the same family; i.e. stings, reeds or brass.

Guitar 1 (full year)

This class is for students of all levels. Instruction starts with the most basic aspects of the guitar and moves through the most advanced. Both pick style and classical (finger styles) are included. Reading music and basic music theory is part of the class. Students begin with reading single melodic lines. From there they develop harmonic concepts and learn chords. They will perform in ensemble settings performing traditional folk styles, classical styles, rock and other contemporary styles.

Beginning Band (full year)

The primary function of the music curriculum is to establish a foundation for a lifelong relationship with music. Within the curriculum, opportunities for both individual and group experiences occur when performing, creating and expressing musical concepts. Aesthetic values are developed with the application of specific criteria. Beginning band provides students the opportunity to begin their training on woodwind, brass, or percussion instruments. Participation in all concerts and performances is mandatory.

Beginning Orchestra (full year)

This course stresses basic tonal production and establishes a foundation for the development of technical skills. Students perform in small groups and also solo in class to gain confidence. Scale and rhythmic studies combined with pitch identification, dynamics and tone color are developed. Participation in all concerts and performances is mandatory. Beginning orchestra provides students the opportunity to begin their training on string instruments including violin, viola, cello, or bass. Participation in all concerts and performances is mandatory.

Intermediate Band/Orchestra (full year)

Students refine skills and develop more advanced performance techniques. The development of technical skills necessary to perform Grade 2 level music is stressed. Emphasis is placed on developing formal rehearsal decorum, following a conductor, and developing pitch and rhythmic security in preparation for performing an independent part in the traditional band or orchestra ensemble. The MCPS middle school intermediate band/orchestra may be organized into several small groups of different instrument types, with provisions for combining the groups for public performance. Students learn melodic form and construction as they examine and perform more complex folk melodies and melodies from master composers. Students discuss the social and intellectual influences affecting the creation of the music they are studying. They begin to develop aesthetic criteria for measuring the quality of instrumental performance. Students may be able to attend live performances. Participation in all concerts and performances is mandatory. *Prerequisite:* Attainment of outcomes for Beginning Band or Beginning Orchestra

Middle School Theatre 1 (full year)

Grade 6 students with no previous theatre experience should begin at Level 1 in the curricular sequence. In this beginning level course, students will explore how the theater is a space that both creates and challenges community. Theatre artists create an ensemble amongst themselves which functions as a safe space for risk-taking and creating. A sustained investigation of community in this intermediate level course engages students to study a variety of dramatic works, participate in the creation and enhancement of ensemble, and question the role of theatre within their community.