

January 2024

Dear Parents/Guardians:

This booklet is designed to give you an overview of the three-year instructional program at Herbert Hoover Middle School. It contains information on Montgomery County Middle School courses. Please refer to this resource as you advise your student. The school counselors will support student registration through classroom visits.

We are very proud of our comprehensive program with its emphasis on the whole child. In order to provide a well-rounded curriculum as required by the Maryland State Department of Education, we have structured our electives program to include multiple opportunities for students to be exposed to different experiences with a Science, Technology, Engineering, Art and Mathematics (STEAM) focus. Our instructional teams will work with you to assure that your students are challenged, supported, and nurtured throughout their three years at Hoover.

If you have any questions, please contact your student's school counselor or our School Counseling Office at 301-968-3750.

Sincerely,

Yong-Mi Kim, Ed.D.

Principal

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For more information, please visit the <u>Hoover Counseling Website</u>:

https://www.hoovermscounseling.org/

Introduction

Excerpts from the Montgomery County Public Schools' policy on middle school education are included as background information to help explain the structure and instructional program of Hoover Middle School. One of the primary purposes of the policy is to ensure that middle schools provide strong emphasis on academic achievement and focus on the intellectual, social, emotional, and physical growth of students in their middle learning years. Hoover Middle School works diligently with staff, parents, and students to fully implement the policy.

Philosophy

Each student has a unique combination of abilities and talents, learning rates and styles, hopes and dreams, and problems and fears. The rapid physical change in early adolescence creates great diversity and variability in cognitive functioning and personality development.

Middle school education will address the unique needs and characteristics of emerging adolescents in grades six through eight. It is designed to enable all students to make better sense of their world.

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

Curriculum

The middle school curriculum addresses questions young adolescents have about themselves and the world around them and questions posed to them by the world in which they live. It addresses the needs of all students. Both curriculum content and methodology relate to the interests and needs of young adolescents. They emphasize both product and process. The MCPS approved curriculum forms the framework upon which the Hoover instructional program is built. In addition, it addresses the requirements of a well-rounded curriculum as required by the Maryland State Department of Education.

Middle school is also a time for exploration. Students engage in a variety of experiences and have opportunities to explore a range of courses. Required and exploratory courses provide opportunities for students to develop personal attributes such as self-esteem, responsibility, integrity, pride in achievements, as well as problem-solving, decision-making, study, and thinking skills.

Interdisciplinary Team

At Hoover the teaching staff is organized into interdisciplinary grade level teams. English, reading, mathematics, social studies, science, and foreign language teachers are represented. The grade level teams plan and provide for the daily instructional program. Each team has a leader or

IRT (interdisciplinary resource teacher). Each grade level has an assigned administrator and counselor. Arts and physical education teachers provide instruction for all students across teams.

The team provides a coordinated support and reinforcement program designed to address individual student needs and assessment measures. Support programs such as peer tutoring, mentoring, after-school tutoring, and extended day academic classes are designed to improve overall student performance. Self-esteem for every student is promoted through activities that enable students to develop skills in goal-setting, problem-solving, conflict resolution, leadership, and organization. These programs provide positive reinforcement for students. Teams also conduct activities that reward, praise, and recognize student efforts.

Support Services for Students

Depending on the programs and the needs of students, support services may be given directly in the classroom, individually, or in small groups. The teacher specialists confer regularly with the grade level and arts teams to ensure a consistent and integrated approach to meeting the needs of these students.

The specialists provide services in the following areas:

- Special Education
- Speech Language
- ELD (English for Speakers of Other Languages)
- 504

Students with Individual Education Plans, Limited English Proficiency, or 504 Plans are supported in mainstream and self-contained classes per their individualized plans.

English

1075: Advanced English 6 for StudySync Schools

This course integrates the five English/language arts processes (reading, writing, listening, speaking, and viewing) and the two contents (language and literature) in a thematic organization of six units. Rigor and challenge are essential components of the instructional approach to English 6, and instruction in reading and writing strategies, grammar, and vocabulary is embedded in every unit. Students read, analyze, and study different genres related to each of the themes and complete required common tasks. The common tasks focus primarily on the writing process for three types of writing—argument, narrative, and informative/ explanatory—and they include the use of information, word processing, and presentation technology to address a variety of language skills. Students have opportunities to present their work orally and through various technology tools. All students develop portfolios and revisit their compositions as they work to strengthen their writing skills.

1077: Grade 7 Advanced for StudySync Schools

This course integrates the five English/language arts processes (reading, writing, listening, speaking, and viewing) and the two contents (language and literature) in a thematic organization of six units. It builds on the students' experiences in English 6, involving greater rigor and challenge in the instructional approach to the study of English. Students in English 7 examine language and literature in the context of the challenges people face. Students read, analyze, and study different genres related to each of the themes and complete required common tasks. Core texts include multicultural, contemporary, and classic titles. The common tasks focus primarily on the writing process for three types of writing—argument, narrative, and informative/explanatory— and they include the use of information, word processing, and presentation technology to address a variety of language skills. Students have opportunities to present their work orally and using various technology tools. Instruction in reading and writing strategies, grammar, and vocabulary is embedded in every unit. All students develop portfolios and revisit their compositions as they work to strengthen their writing skills. English 7 prepares students—through activities integrated into each thematic unit—for county, state, and national assessments.

Students are awarded 10 SSL hours at the completion of English 7 for their full participation in SSL activities.

1079: Grade 8 Advanced for StudySync Schools

This course integrates the five English/language arts processes (reading, writing, listening, speaking, and viewing) and the two contents (language and literature) in a thematic organization of six units. It builds on the students' experiences in English 7, involving greater rigor and challenge in the instructional approach to the study of English. Students in English 8 examine language and literature in the context of the challenges people face. Students read, analyze, and study different genres related to each of the themes and complete required common tasks. Core texts include multicultural, contemporary, and classic titles. The common tasks focus primarily on the writing process for three types of writing—argument, narrative, and informative/explanatory— and they include the use of information, word processing, and

presentation technology to address a variety of language skills. Students have opportunities to present their work orally and using various technology tools. Instruction in reading and writing strategies, grammar, and vocabulary is embedded throughout every unit. All students develop portfolios and revisit their compositions as they work to strengthen their writing skills. English 8 prepares students—through activities integrated into each thematic unit—for county, state, and national assessments.

ELD (English Language Development)-Grades 6, 7, 8

The English Language Development (ELD) program provides high quality English language instruction aligned to grade level content standards in English/Language Arts. These courses focus on helping students develop the academic language proficiency needed to be able to learn content knowledge, skills and processes and effectively use language to communicate proficiently in mainstream courses. These courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ELD courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and support the development of reading and writing.

The State of Maryland is a member of the World-Class Instructional Design and Assessment (WIDA) Consortium. As a member of WIDA, the Maryland State Department of Education and all public school systems in Maryland use the WIDA English language development standards and assessments to guide the development of ESOL curriculum, assess English language proficiency levels, and inform ESOL instructional placement decisions.

Students who need language instruction to acquire English receive English language development instruction aligned to the English language proficiency (ELP) and content standards. Beginning ESOL students, scoring at WIDA Level 1.0 to 2.9, receive sheltered instruction in English and

other content courses. Intermediate and Advanced ESOL students, scoring at WIDA Levels 3.0 to 4.4, receive English language development (ELD) instruction from a dually certified (English/ESOL) who is also responsible for teaching English content or they receive ELD instruction in a co-teaching model from an English and ESOL teacher. ESOL students can only receive 2 English credits from ELD courses (e.g., English for Beginning ELs, English for Intermediate ELs and English for Advanced ELs).

The Residency and International Admissions Office of Montgomery County Public Schools determines student placement in ESOL classes.

New Middle School ELD Courses*

1271-English 6 for ELs I
English/Language Arts I (6th grade)
courses build upon students' prior
knowledge of grammar, vocabulary,
word usage, and the mechanics of
writing and usually include the four
aspects of language use: reading,
writing, speaking, and listening.
Typically, these courses introduce
and define various genres of
literature, with writing exercises
often linked to reading selections.
These courses also provide an
explanation of the English
language, enabling students to
progress from a beginning level of

English

ELP 1 (Double Period)

1071 E. P. C. C. EI . I

understanding

ELP 2 (Double Period)

1274-English 6 for ELs II English/Language Arts II (6th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from an intermediate level understanding of English

ELP 3 (Single Period)

1277-English 6 for ELs III English/Language Arts III (6th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from an advanced level of understanding of English

vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

1272-English 7 for ELs I

English/Language Arts I (7th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an of explanation the **English** language, enabling students to progress from a beginning level of understanding of English vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts

1273-English 8 for ELs I

English/Language Arts I (8th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from a beginning level of understanding of English vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

1275-English 7 for ELs II

English/Language Arts II (7th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the **English** language, enabling students to progress from an intermediate level understanding of English vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

1276-English 8 for ELs II

English/Language Arts II (8th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from an intermediate level understanding of English vocabulary and grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

vocabulary and complex grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

1278-English 7 for ELs III

English/Language Arts III (7th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from an advanced level of understanding of English vocabulary and complex grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

1279-English 8 for ELs III

English/Language Arts III (8th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections. These courses also provide an explanation of the English language, enabling students to progress from an advanced level of understanding of English vocabulary and complex grammatical structures to a more comprehensive grasp of various formal and informal styles of using Academic English in the context of English Language Arts.

*ELP 4 receive ELD instruction in a co-taught model or with an ESOL teacher teaching an English course with the '40' suffix.

World Languages

Note: Final decisions about the specific offerings will depend on student registration and staffing allocation.

The MCPS world languages program follows the American Council on the Teaching of Foreign Languages (ACTFL) standard that "effective language instruction must provide significant levels of meaningful communication and interactive feedback in the target language in order for students to develop language and cultural proficiency." The ability to communicate in a culturally appropriate manner with speakers of other languages is the key to success in the increasingly diverse global community of the 21st century. Hoover currently offers courses in Chinese, Spanish, and French at all grade levels.

Course Level Descriptions

Introduction to Language and Culture

New to language. This course is designed to introduce the students to a second language and to develop interest in customs and life in other language-speaking countries. The emphasis is on vocabulary acquisition, speaking and listening opportunities, and cultural exploration and experiences. Students will be introduced to Spanish, French, Chinese, and Korean.

Level 1

Novice-low to novice-mid. 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.

Level 2

Novice-mid to novice-high. Students expand their ability to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret information when listening and reading. Vocabulary and grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

Level 3

Novice-high to intermediate-low. Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

Course Themes

Chinese 1

- 1A themes are: Getting Acquainted, Family, Classroom, and Calendar.
- 1B themes are: Chinese Money, My School, Daily Routines, and Food Preferences.

Chinese 2

- 2A themes are: The People Around Me, Occupations, and Wellness.
- 2B themes are: Festivals and Celebrations, School, and Restaurant Experiences.

Chinese 3

- 3A themes are: House, Pastimes and Weather, and Clothing and Shopping.
- 3B themes are: Community, Transportation, and Travel.

French 1

- 1A themes are: Welcome to French Class, What Do You Like?, Family, and At School.
- 1B themes are: **Pastimes, Meals, Clothing, and At Home.**

French 2

- 2A themes are: My Family, My Friends, and I, Let's Party, Let's Go Shopping, and School and Classes.
- 2B themes are: My Daily Routines, When I Was Little, Let's Go Camping, and How Do You Feel?

French 3

- 3A themes are: Back to School, At Work!, Friends and Family, and The Great Outdoors
- 3B themes are: The News, Ecology, Let's Travel, and Art

Spanish 1

- 1A themes are: Introducing Myself, My Likes & Talents, My Day at School, and Our Home
- 1B themes are: This Is Us, My Free Time, Food, and Vacations

Spanish 2

- 2A themes are: Return to Classes, Family Life, and An Ideal Community
- 2B themes are: I Invite You to Cook!, Time to Share, and A Memorable Trip

Spanish 3

- 3A themes are: Our Generation, The Digital World, and Health Life Style
- 3B themes are: A Sustainable Planet, Professional Development, and Solidarity Around Me

High School Credit

World Language courses are high school credit bearing courses. In order to receive credit for high school courses completed while in middle school, middle school students must meet the same requirements as high school students and earn a final grade of A, B, C, or D.

For students who entered Grade 6 prior to the 2018-2019 school year, the final grade and credit for high school courses successfully completed in middle school are reported on the high school transcript and included in the calculation of the student's cumulative GPA.

For students who enter Grade 6 during or after the 2018-2019 school year, 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 the grade earned improves the student's cumulative GPA. If the course grade for a high school course taken in middle school improves the student's cumulative GPA, it will be applied automatically by MCPS.

On February 3, 2023, Montgomery County Public Schools (MCPS) Regulation IKC-RA, *Grade Point Averages (GPAs) and Weighted Grade Point Averages (WGPAs)*, has been revised at the request of the Office of Curriculum and Instructional Programs to clarify guidance about high school credits earned in classes with weighted grade points earned by a student in middle school. The updated guidance clarifies that for students who entered Grade 6 during or after the 2016-2017 school year, the final grade for high school courses successfully completed in middle school will be automatically applied to the student's cumulative GPA/WGPA, if the course grade improves the GPA and WGPA. (MCPS Regulation IKC-RA)

Additional information can be found in MCPS Regulation IKC-RA, Grade Point Averages (GPA) and Weighted Grade Point Averages (WGPA).

GRADE 6 OPTIONS	GRADE 7 OPTIONS	GRADE 8 OPTIONS
 Introduction to Language and Culture Chinese 1A/B Immersion* Chinese 1A/B French 1A/B Spanish 1A/B Spanish 1 A (Full Year) 	 Chinese 1A/B Chinese 2A/B French 1A/B French 2A/B Spanish 1 A (Full Year) Spanish 1B (Full Year) Spanish 1A/B Spanish 2A/B 	 Chinese 1A/B Chinese 2A/B Honors Chinese 3A/B French 1A/B French 2A/B Honors French 3A/B Spanish 1B (Full Year Spanish 1A/B Spanish 2A/B Honors Spanish 3A/B

^{*}Students who have successfully completed the Potomac Elementary School or Bayard Rustin Elementary School Chinese Immersion Program will register for the immersion version of the course

Mathematics

AMP 6+: ImagineLearning Illustrative Mathematics Accelerated Math 6

Course Description:

Illustrative Mathematics 6–8 Math Accelerated provides a pathway to Algebra 1 by the 8th grade addressing mathematical access, opportunity, and equity for students by allowing them to complete a graduation requirement in middle school. This allows students to enroll in more advanced-level math courses in high school to prepare them for college and career-readiness. Current Grade 5 students enrolled in the Math 5 course will be able to take the Accelerated Grade 6+ course in Grade 6, the Accelerated Grade 7+ course in Grade 7, and Algebra 1 in Grade 8. The Illustrative Mathematics 6–8 Math Accelerated course is a comprehensive, standards-aligned, two-course curriculum designed to provide an effective accelerated pathway to Algebra 1. It includes all of the standards in Illustrative Mathematics Grades 6–8 Math and compacts them into a two-year curriculum meant to be covered during the 6th and 7th grades. The pace is faster than Illustrative Mathematics Grades 6–8 Math, but no crucial mathematical concepts are missed.

The course begins with a study of area and surface area 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. Next, 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.

Topics of Study:

- Areas
- Ratios, Rates, & Percentages
- Equations and Expressions
- Proportional Relationships
- Rational Numbers
- Data Sets and Distributions

AMP 7+: ImagineLearning Illustrative Mathematics Accelerated Math 7

Course Description:

This 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.

Students begin the course with transformational geometry. They study rigid transformations and congruence, then scale drawings, dilations, and similarity (this provides background for understanding the slope of a line in the coordinate plane). Next, they expand their ability to work with linear equations in one and two variables and deepen their understanding of equivalent expressions. They then build on their understanding of proportional relationships from the previous course to study linear relationships. They express linear relationships using equations, tables, and graphs, and make connections across these representations. Building on their understanding of a solution to an equation in one or two variables, they understand what is meant by a solution to a system of equations in two variables. They apply their understanding of linear relationships to contexts involving data with variability. They learn that linear relationships are an example of a special kind of relationship called a function. They extend the definition of exponents to include all integers, and in the process codify the properties of exponents. They learn about orders of magnitude and scientific notation in order to represent and compute with very large and very small quantities. They encounter irrational numbers for the first time and informally extend the rational number system to the real number system, motivated by their work with the Pythagorean Theorem. The last unit offers students an optional opportunity to synthesize their learning from the year using a number of different applications.

Topics of Study:

- Rigid Transformations and Congruence
- Scale Drawing, Similarity, and Slope
- Writing and Solving Equations
- Inequalities, Expressions, and Equations
- Linear Relationships
- Functions and Volume
- Exponents and Scientific Notation
- Pythagorean Theorem and Rational Numbers

ImagineLearning Illustrative Mathematics Grade 8 Course

Course Description:

The Grade 8 Math Course builds on the learning from both the Grade 6 Math and Grade 7 Math Courses. There are intentional connections between and within units in this course. This allows students to explore ideas informally and concretely in order to build toward a more formal and abstract understanding. The intent of this course, through the organization of content, carefully selected pedagogy, and inclusion of the Standards of Mathematical Practice in design, is that students will work collaboratively to deepen their understanding of concepts, practice procedural skill and fluency, and apply their understanding to a variety of contexts.

Students begin the Grade 8 Math Course with transformational geometry. They then apply the proportion relationship learning from grade 7 to study linear relationships in a variety of contexts and using a variety of representations. The first semester ends with students building on their prior work with linear equations and an introduction to linear systems. In the second semester, students are introduced to functions and then apply their understanding of linear relationships and functions to contexts involving data with variability. Work from grade 6 about exponents extends to include all integers and the properties of exponents. In Grade 8 Math, students encounter both scientific notation and irrational numbers for the first time. The year concludes with the study and application of the Pythagorean Theorem and a study of volume.

In Grade 8 Math, there are approximately two units per quarter. The course ends with a culminating optional unit that combines learning from previous units.

Topics of Study:

- Rigid Transformations and Congruence
- Dilations, Similarity, and Introducing slope
- Linear Relationships
- Linear Equations and Linear Systems
- Functions and Volume
- Associations in Data
- Exponents and Scientific Notation
- Pythagorean Theorem and Irrational Numbers

Algebra 1

Course Description:

The Algebra 1 A/B Course is a high school level course designed to explore, analyze, and model real-world phenomena through a mathematical lens. Exploration of linear, exponential, and quadratic functions forms the foundation of the course. Students develop conceptual understanding and fluency in solving equations, inequalities, and systems by explaining and validating their reasoning with increased precision. Students deepen their understanding of functions and their ability to represent, interpret, and communicate about them. Key characteristics and representations of functions—graphic, numeric, symbolic, and verbal—are

analyzed and compared. Students use these representations to model relationships and constraints, but also reason with them abstractly. One- and two-variable data sets are interpreted using mathematical models. Gathering and displaying data, measuring data distribution, and interpreting statistical results encourages students to collaborate, communicate, and explore new tools and routines. They then take these insights to a unit on two-variable statistics, where they extend their prior knowledge of scatter plots and lines of best fit. Throughout the units of study, classroom activities provide students with opportunities to engage in aspects of mathematical modeling. Modeling prompts are used so that students experience and engage in the full modeling cycle.

In Algebra I, there are approximately two units per quarter. MCPS has resequenced the units, so that the statistical units are at the end of the course.

Topics of Study:

- Linear Equations, Inequalities, and Systems
- Functions
- Introduction to Exponential Functions
- Introduction to Quadratic Equations
- Quadratic Equations
- One-Variable Statistics
- Two-Variable Statistics

Honors Geometry

Course Description:

Honors Geometry is a high school level course and 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.

Topics of Study:

- Congruence
- Similarity, Right Triangles, and Trigonometry
- Circles
- Expressing Geometric Properties with Equations
- Geometric Measurement and Dimension
- Modeling with Geometry

Science

The middle school science program allows students to investigate both the concepts and practices of Science and Engineering. At each grade level, topics in Life Science, Earth Science, Physical Science, and Engineering are interconnected to show students the relationships that exist between the sciences and 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 in part through a Howard Hughes Medical Institute grant and reflects the Next Generation Science Standards adopted by the State of Maryland. High expectations and differentiated instruction allow all students a challenging and engaging access to science.

Investigations in Earth Science 6th Grade (New Curriculum 22-23)

The NGSS aligned Investigations in Earth Science course provides opportunities for students to engage in science and engineering practices and apply crosscutting concepts to deepen their understanding of core ideas across science disciplines. The curriculum is phenomena-based; instruction is woven around a relevant problem/project that drives student learning. Students apply their understanding of science, technology, engineering, and mathematics (STEM) to propose solutions to problems. Instruction provides opportunities for hands-on explorations, productive discourse, and purposeful reading and writing. The course starts with a foundational approach to science instruction to develop student skills in the metric system, scientific method, and science and engineering practices, taught through the lens of stream ecology. Additional units include weather and climate, earth's materials and processes, natural resources, and geologic history. Students are awarded 10 SSL hours for participating in activities built into the course.

Investigations in Earth Science

- Unit 1: Watershed Science
- Unit 2: Atmospheric Phenomena
- Unit 3: Dynamic Earth
- Unit 4: Earth's Geologic Past
- Unit 5: Earth's Energy Resources and Human Impacts

Investigations in Life Science 7th Grade (New Curriculum 23-24)

The NGSS aligned Investigations in Life course provides opportunities for students to engage in science and engineering practices and apply crosscutting concepts to deepen their understanding of core ideas across science disciplines. The curriculum is phenomena-based; instruction is woven around a relevant anchoring phenomenon/project that drives student learning. Students apply their understanding of science, technology, engineering, and mathematics (STEM) to propose solutions to problems. Instruction provides opportunities for hands-on explorations, productive discourse, and purposeful reading and writing. The course engages students in learning around cellular structures and processes, matter and energy flow in organisms, inheritance and variation of traits, ecology, and biological evolution.

Investigations in Physical Science 8th Grade (New Curriculum 24-25)

Students in the Investigations in Physical Science (IPS) will experience an interdisciplinary approach to science content, exploring two of the three domains of science (Physical & Earth Science) through hands-on explorations, productive discourse, and purposeful reading and writing. In the course, students will explore concepts in chemistry, physics, and astronomy. The curriculum is problem/project-based where students apply their understanding of science, technology, engineering, and mathematics (STEM) to propose solutions to real world phenomena/problems. Students will take the Maryland Integrated Science Assessment (MISA) during March to assess their knowledge of the concepts learned throughout the middle school science curricular program

Social Studies

The goal of the MCPS Social Studies Program is to help create literate and well-informed citizens who actively participate in a democratic society. Social studies is the part of the school curriculum that employs the concepts, facts, generalizations, and skills of history and the social sciences to promote responsible citizenship. Through the study of history, past events and decisions are examined critically and assessed according to their importance for the present and future. Our social studies curriculum is a comprehensive study of our community, nation, and world, offering students the skills and knowledge to thrive in an increasingly complex society.

The middle school social studies curriculum is designed to provide students with a firm foundation in the structures and concepts of the systems of geography, economics, politics, and culture that exist in today's world as well as the historical basis of those systems. Included in this foundation are the requisite skills necessary for students to independently acquire, interpret, evaluate, and communicate information. In addition, lessons teach students historical-thinking skills. This includes the ability of students to critically read and write in response to primary and secondary historical sources. This foundation is intended to best prepare students for the rigor of future high school coursework.

There are two major strands that run through all units in grades six through eight. The first strand is specific present-day content in geography, economics, political systems, or culture. The second strand is historical. The history strand progresses chronologically by unit from ancient history to approximately 1000 CE in grade six, early modern world history in grade seven, and U.S. history to 1890 in grade eight.

Historical Inquiry into Global Humanities 6

The goal of the social studies curriculum in grade six is to introduce students to ancient civilizations using a variety of skills and materials. Students gain knowledge of patterns of settlement and the components necessary for a civilization to develop. They trace the development of such early cultures as ancient Egypt, Greece, Rome, and China. Students will 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 activity at the end of the year. The curriculum is divided into four units: Patterns of Settlement in the Ancient and Modern Worlds; The Impact of Economics in Ancient and Modern China; Citizenship and Governance in Classical and Modern Times; The First Millennium and Today.

Historical Inquiry into Global Humanities 7

This course covers the foundations of modern history in Europe, Africa, and Latin America. This includes the ability of students to critically read and write in response to primary and secondary historical sources. Students will 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. In addition, students will participate in a three- week study of financial literacy, which will culminate with a field trip to Finance Park. The curriculum is divided into four units: The

Foundations of Modern Political Systems: Europe in the Middle Ages; The Influence of Culture in Africa; Geography and Identity in Latin America; and The Impact of Economics: One World.

Historical Inquiry into American Studies 8

In this course, students will use the Social Studies Literacy Skills with increasing complexity as they explore the history of the United States from colonization to post Civil War Reconstruction and Industrialization. Throughout the course students will analyze multiple perspectives and study how diverse populations of Americans, including Native Americans, African Americans, women, immigrants, and Mexican Americans, contributed to and were impacted by events while making connections between the past and the present. This course prepares students for continuing their study of U.S. History in ninth grade.

Physical & Health Education

(Physical Education Uniform – Strongly Recommended and will be available online over the summer)

Physical Education

Physical Education classes are taught in every grade level and are designed to provide challenges for students to develop, maintain, and refine motor development. A wide variety of physical activities are provided to meet each individual's fitness, skill, and interest needs. Students are given opportunities to experience enjoyment and satisfaction through successful participation in individual, small group, and large group physical activities. Students participate in a variety of invasion, net/wall, and hitting/striking games with a focus on teaching sport concepts and skills. In addition, fitness, weight training, and track and field skills are included in all physical education classes.

Health Education

Comprehensive Health Education is taught for a term of nine weeks during Grades 6, 7 and 8. Units of study vary within each grade level:

Grade 6	Grade 7	Grade 8
Mental and Emotional	Mental and Emotional	Mental and Emotional
Health	Health	Health
Personal & Consumer	Personal & Consumer	Personal & Consumer
Health	Health	Health
Substance Use and	Substance Use and	Substance Use and
Misuse Prevention	Misuse Prevention	Misuse Prevention
Healthy Eating	Healthy Eating	Healthy Eating
Safety & Violence	Safety & Violence	Safety & Violence
Prevention	Prevention	Prevention
	• Family Life & Human	• Family Life & Human
	Sexuality	Sexuality
	Disease Prevention and	Opioid Prevention
	Control	-

Health skills emphasized throughout the program include analyzing influences; accessing information; interpersonal communication; decision making; goal-setting; self-management; and advocacy for personal, family and community health. A parent information session regarding the content of the Family Life & Human Sexuality Unit and the Disease Prevention Unit is conducted in the fall for parents. Parents give passive consent from these units unless a signed permission slip is given to the teacher indicating the student opt out for the FLHS/DPC unit(s) in grades 7 & 8. Alternative units of study are available for students who do not opt into the Family Life & Human Sexuality Unit and the Disease Prevention Unit.

Quarterly Rotations/Semester Electives or Full-Year Music Courses

In order to provide a well-rounded curriculum as required by the Maryland State Department of Education, we have structured our electives program to include multiple opportunities for students to be exposed to different experiences with a Science, Technology, Engineering, visual and performing arts, and Math/Music/Movement (STEAM3) focus. Sixth and seventh grade students may elect to take a full-year of four quarterly, paired, nine-week courses or a full-year music course. Eighth grade students may elect to take a full-year of paired semester courses or a full-year music course. The table below shows the options available to students per grade level. Course descriptions follow.

	Fine Arts Courses		Full-Year Music Course Options
Grade 6	Grade 6 Quarterly Rotation	Or	Band 6
		Or	Intermediate Orchestra
Grade 7	Grade 7 Semester Electives		Advanced Band
		Or	Orchestra
			Concert Band
			Concert Orchestra
Grade 8	Grade 8 Full Year Elective		Advanced Band
		Or	Advanced Orchestra
			Concert Orchestra
			Chorus

6th Grade Elective Rotation

In order to provide a well-rounded curriculum as required by the Maryland State Department of Education, we have structured our electives program to include multiple opportunities for students to be exposed to different experiences with a Science, Technology, Engineering, visual and performing arts, and Mathematics (STEAM3) focus. Students who choose to enroll in the 6th Grade Arts Rotation will experience four quarterly, nine-week classes across these content areas.

7th Grade Semester Electives Pairings

In order to provide a well-rounded curriculum as required by the Maryland State Department of Education, we have structured our electives program to include multiple opportunities for students to be exposed to different experiences with a Science, Technology, Engineering, visual and performing arts, and Mathematics focus. Students who choose to enroll in the 7th Grade Semester Electives will experience a paired semester course within these content areas.

8th Grade Full Year Electives

Students will have the opportunity to select a year-long elective focused on fine arts or computational learning. Students will not be able to change their elective choice throughout the school year.

Quarterly, Semester and Full Year Electives Course Descriptions:

Art Studio

In this course, students will identify and create artworks that communicate universal themes about people, events, and values that unite communities. Through art production and investigation, students will increase their understanding of why people create art, and develop an appreciation of different cultural and individual artist styles. Students will learn to appreciate the uniqueness of individual artwork. Students will work in two and three-dimensional media, including drawing, painting, sculpture, and they will use the art elements and design principles to compose personal artworks from observation and imagination. Craftsmanship, aesthetics and dedication are emphasized.

Ceramics

The middle school Ceramics/Sculpture 3 curriculum is investigative and performance-based in nature. Student-driven artmaking encourages creativity while using higher level thinking skills to expand aesthetic and intellectual awareness. Students will develop true artistic literacy and require students to engage in artistic processes directly through the use of authentic tools and materials. Students will create a variety of 3D & 2D sculptures. In addition, students will explore INFLUENCE and the many ways this theme can be represented through visual art.

Computer Assisted Drafting (CAD) & Robotics

This course features two parts. During the first nine weeks, the course will introduce basic concepts, software, and applications of computer-aided drafting (CAD). Students will apply CAD techniques to architectural and product design. During the second nine weeks, students will explore robotics through lessons, demonstrations, and hands-on activities. Students will design, create, and program robots in a team-based environment using the LEGO Spike Prime Robotics system. This course is designed for students who are computer literate.

Computer Literacy

Students acquire knowledge and skill sets connected to content areas involving the use of application, web-based, and multimedia tools. Students use word processing, spreadsheet presentation, programming, and research skills to complete authentic projects. This course focuses on the selection and use of appropriate technology tools and resources to solve problems and accomplish a variety of tasks.

Code

This course provides an engaging introduction to computing concepts and is supported through a nationally developed curriculum, which is offered through a unique partnership with Code.org®. The course focuses on the conceptual ideas of computing so that students understand why tools and languages are used to solve problems through a study of human computer interaction, problem solving, web design, programming, and data analysis.

Digital Art

Students learn the basics of creating digital art using PhotoShop as a tool. They build upon art concepts they have explored in the past, such as the Elements of Art and Design: Line, Shape, Space, Color, Value, and Texture. In addition, the students will be able to implement the Principles of Design: Balance, Emphasis, Unity, Rhythm, Movement, and Proportion into their artwork. There is an emphasis on creating digital art, both vector and raster graphics, using Photoshop Selection Tools and Typography. This is a project-oriented class allowing the students opportunities to express themselves while learning creative skills.

Drama

In this course, students will explore how the theater is a space that both creates and challenges community. Theater 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 theater within their community.

Forensics

Do you like to watch crime shows and guess who the culprit is? Do you secretly wish to become a CSI agent? Are you able to focus on minute details? Then Forensics is the right class for you! Forensic Science is the analysis of physical evidence from a crime scene. We will study fingerprints, blood, tire marks, chemicals, insect evidence and much much more!

Foundations of Engineering and Technology TEC2016 (A/B)

The goal of this course is to help students develop three key dimensions of technological literacy—knowledge, critical thinking, and applying skills—with the overall goal of helping students develop the characteristics of a technologically literate citizen.

As the world grows more complex, it is increasingly important for everyone to understand more about technology and engineering. People need to understand technology's impacts on their lives, society, and the environment, as well as how to use and develop technological products, systems, and processes to extend human capabilities. These understandings are all important elements of technological and engineering literacy.

During this year-long course, students will be looking deeper into the Engineering Design Process (EDP) through exploration and experimental design as students tackle various problems or challenges. Students will use technology as a means to research solutions to the problems presented or to create working prototypes of simple and complex machines.

Students will use tools to construct projects, following the EDP to determine the problem, imagine a solution, plan out the process of creation, create a prototype, and improve upon the design until it successfully meets certain criteria outlined in the project. Students will gain an appreciation of art and its relationship to the engineering process when generating aesthetically appealing designs. This course is directly in line with the NGSS Standards for Engineering.

This course satisfies the technology graduation requirement (1 full credit is required to graduate)

General Music/Voice

In this course, students will have the opportunity to learn about music and instruments from a variety of world cultures. Students explore various genres of music through singing, performing on instruments, and creating music.

Global Citizenship

Students will learn what it means to be a global citizen in a globalized world. Students will learn the importance of the sustainable development goals in combating world issues. Students will discuss current events, create unique art and projects, and participate in problem based learning activities. Students will learn about topics such as globalization, the environment, immigration, global cultures, social justice, and international sports.

Introduction to Code

Students learn about the concepts of technology, use the Engineering Design Process, elements of good game design, and the different game genres as well as basic video game coding concepts by making different types of games, including racing, platform, launching, and more. Students will apply computational thinking to their game designs.

Marine Biology

This course explores the relationship between the abiotic and biotic factors in marine ecosystems in more depth than the first marine biology course. The course begins with two basic lab skills and two STEM challenges. Topics of study include the evolution of marine life forms, marine adaptations and natural selection, marine food webs with a special attention on phytoplankton and zooplankton. Three weeks of microscope work allow us to study Kingdom Protista in great detail. Our study of marine symbiosis with an emphasis on coral reefs and mangrove ecosystems allows us to explore these beautiful habitats and the populations that live there. As we study Phylum Chordata we will focus on dolphins, marine sea turtles and celebrate our own "Shark Week." Towards the end of the semester we will examine human impacts on marine ecosystems including climate change, over harvesting, coastal development and trash. This course includes a possible optional visit to the Ocean's Hall at the Smithsonian. Learning simulations include "Fishy, Fishy, Anemone" and "Symbiosis Tag." The course is 90% lab work with no homework tests or quizzes. In lieu of an exam the class will conduct a shark dissection.

Principles of IT, Cybersecurity, & Engineering

Students learn and apply the Engineering Design Process and use their engineering-thinking skills to creatively address challenges affecting individuals and societies.

Web Design

Students use code.org as a platform to learn about Web Design, including HTML and CSS coding. Students use this platform to explore both the mechanics and purpose of Web Sites.

while creating their own Personal Website. There is an emphasis on Digital Responsibility as well as using a Web Site as an expressive tool.

Yearbook

Students learn the techniques and principles of yearbook journalism including layout and design. The goal of the staff is to produce a journalistically sound, creative, and unique book; foster student growth in journalism and graphic design; develop leadership skills; and provide experience in business management.

Full-Year Music Course Descriptions—Band, Orchestra, and Chorus:

Advanced Band

This year-long course is offered to students with at least two years of prior experience in band. Students may enroll only by audition or by permission from the director. This course is designed to continue to develop a strong foundation in technique, including tone production, note reading, and rhythmic concepts. Students will perform a variety of moderately difficult to very difficult music. Students will perform for all evening concerts along with concerts at venues around the Hoover Middle School area. Daily practice outside of class is required.

Advanced Orchestra

This year-long course is offered to students with at least two years of prior experience in orchestra. Students may enroll only by audition or by permission from the director. This course is designed to continue to develop a strong foundation in techniques, including tone production, note reading, and rhythmic concepts. Students will perform a variety of moderately difficult to very difficult music which will require a command of string technique. Students will perform for all evening concerts along with concerts at venues around the Hoover Middle School area. Daily practice outside of class is required.

Band 1

This is a full year course and designed to give students a strong foundation in the fundamentals of performance of a wind or percussion instrument. Students will rehearse and perform a variety of different musical styles. Students will perform at all evening concerts. Daily practice outside of class is required.

*Sixth grade students interested in learning to play an instrument for the first time will need to meet privately with Mr. Masaki at the beginning of the school year in order to choose an instrument and receive extra help as needed. Through practice and hard work, beginners will be able to catch up to classmates with prior experience.

Concert Band

This full-year course is offered to students with at least one year of prior experience in band. There is an opportunity to explore "color" instruments (tuba, French horn, oboe, bassoon, bass clarinet, and tenor and baritone saxophones) in order to achieve a balanced instrumentation. The course is designed to give students a strong foundation in band techniques, including tone production, note reading, and rhythmic concepts. Students will perform a variety of moderate to moderately difficult music. Students will perform for all evening concerts along with concerts at venues around the Hoover Middle School area. Daily practice outside of class is required.

Concert Orchestra

This full-year course is offered to students with at least one year of prior experience in orchestra. This course will continue to strengthen rhythm, tone production and technique and work on advanced techniques such as shifting, advance bow technique and vibrato. This group will

perform moderate to moderately difficult music. This ensemble will perform at all evening concerts. Daily practice outside of class is required.

Intermediate Orchestra

This is a full year course and designed to give students a strong foundation in the fundamentals of performance on a string instrument. Students will work on proper left hand and bowing technique along with positions and shifting. Students will rehearse and perform a variety of different musical styles. The students will perform at all evening concerts. Daily practice outside of class is required.

*Sixth grade students interested in learning to play an instrument for the first time will need to meet privately with Mr. Masaki at the beginning of the school year in order to choose an instrument and receive extra help as needed. Through practice and hard work, beginners will be able to catch up to classmates with prior experience.

Chorus

This course is designed for students of all voice parts with all levels of experience. Through choral music, students will develop skills not only in music, but also public speaking, performing in front of an audience, building self-confidence, and learning how to act as an integral part of a team. Students enrolled in chorus will be able to demonstrate appropriate vocal (singing) skills; demonstrate how to interpret a song and its meaning; understand and use basic music terminology; understand and use basic music theory and reading skills; and demonstrate proper rehearsal and performance techniques.

Students will perform at a minimum of three evening performances and a minimum of two music festivals. Students in this ensemble, while not required, will be eligible to audition for MCPS Middle School Honors Chorus and Maryland Junior All-State Chorus..