



# Farquhar Middle School

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COURSE BULLETIN  
2024-2025

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# GRADE 6

## AT A GLANCE

The 6th grade student's instructional program consists of a total of seven (7) classes that encompass educational growth, program continuity, and preparation for high school & college. This instructional program is achieved through a combination of required and elective courses, with options for advanced level programs:

- 1) ENGLISH 6 OR ADVANCED ENGLISH 6
- 2) DIGITAL LITERACY OR ACADEMIC LITERACY/DEVELOPMENTAL READING
- 3) MATH 6 OR ACCELERATED MATH 6 PLUS OR APPLIED INVESTIGATIONS IN MATH
- 4) INVESTIGATIONS IN EARTH SCIENCE
- 5) HIST. INQUIRY WRLD STUDIES 6 OR HIST. INQUIRY GLOBAL HUMANITIES 6
- 6) PHYSICAL EDUCATION 6/HEALTH EDUCATION 6
- 7) ELECTIVE: *Arts Rotation, or Beginning Band MS & Creative Thinking, or Beginning Orchestra & Creative Thinking*

*Note: Students enrolled in special programs should consult with their counselor to choose the appropriate elective option.*

## ENGLISH

### ENGLISH 6 (ENG1009)

This course involves implementation of the StudySync English 6 curriculum. 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.

### ADVANCED ENGLISH 6 (ENG1010)

This course involves implementation of the English 6 curriculum for 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.

### DIGITAL LITERACY (ENG1030)

The Digital Literacy curriculum focuses on developing critical and creative thinking through reading, writing, speaking, listening, and viewing in a 21<sup>st</sup> century approach. Working through a problem-based process, students learn to define real-world problems of interest, research the causes of those problems using real-time global texts and then create solutions to address the problems. Students will advance their understanding of comprehension, analysis, and evaluation of text as well as vocabulary acquisition through reading complex informational and argumentative texts in a technology-rich medium. Students will collaborate regularly both through the research and the solution phases of their investigations.

## **MATHEMATICS**

### **GRADE 6 MATHEMATICS (MAT1005)**

This course extends students' understanding of concepts developed throughout the elementary grades. The intent of this course 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.

### **ACCELERATED MATH 6+ (MAT1015)**

This course extends students' understanding of concepts developed throughout the elementary grades. 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.

### **APPLIED INVESTIGATIONS in MATHEMATICS (MAT1003)**

This course is recommended for students who have taken the compacted 5/6 mathematics course and successfully completed the Math 6 standards. This course compacts all of the Grade 7 Common Core State Standards (CCSS) and much of the Grade 8 CCSS into a single year. Students who successfully complete AIM are prepared for Algebra 1 in Grade 7.

## **SCIENCE**

### **INVESTIGATIONS IN EARTH SCIENCE (SCI1022)**

This NGSS aligned 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. 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 earn SSL (student service learning) hours for successful completion of the SSL project embedded in built into the course.

## **SOCIAL STUDIES 6**

### **HISTORICAL INQUIRY IN WORLD STUDIES 6 (SOC1001)**

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

### **HISTORICAL INQUIRY INTO GLOBAL HUMANITIES 6 (SOC1009)**

This course is built around the core Grade 6 social studies curriculum, Historical Inquiry in World Studies 6,

that includes historical content from early civilizations, the empires of Greece and Rome, the dynasties of China, and civilizations of the first millennium. Cohort students will go beyond this core as they learn additional content, explore deeper connections to today, engage in investigative inquiry to strengthen their writing through Document Based Questions, and enhance their learning through relevant literature connections. They will also participate in a culminating Model UN simulation at the end of the year.

## **PHYSICAL & HEALTH EDUCATION**

### **PHYSICAL EDUCATION 6 (HPE1003)**

Middle school physical education instruction focuses on standards-based content that has been categorized into three measurement topics: Health-enhancing level of physical activity and fitness, movement skills and concepts, and personal and social behaviors. Students will engage in fitness testing, skill acquisition, and modified game-type activities during three quarters of their 6<sup>th</sup> grade school year. Our goal is to have students become physically literate by establishing healthy habits and a mindset that motivates performance as well as positive sportsmanship.

### **HEALTH EDUCATION 6 (HPE1000)**

Health education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills adopted from the National Health Education Standards. This course takes place during one quarter of the 6<sup>th</sup> grade school year and includes the following units of study: Mental & Emotional Health (MEH), Substance Use & Misuse Prevention (SUMP), Safety & Violence Prevention (SVP), and Healthy Eating (HE).

## **6<sup>TH</sup> GRADE ELECTIVES – CHOOSE ONE**

**6<sup>th</sup> Grade students may pick between the Arts Rotation (Three Trimester Courses) OR Band 6 (Full Year Course) OR Orchestra 6 (Full Year Course).**

- 1) **ARTS ROTATION (Three Trimester Courses):** Students will explore introductory courses that may include:
  - o **MS Studio Art 1 (ART1024)**  
Students will work with a variety of art materials, create drawing, painting, and sculpture projects, and will study master artists throughout history.
  - o **MS Digital Art and Photography 1 (ART1018)**  
This course is designed for students to learn the photo-editing software, *Photoshop CS6*. They will be able to make adjustments to photographs and artistically transform them into a piece of artwork. Photographic quality printers and paper will be used for the final products.
  - o **MS Introduction to Tech and Engineering (ENR1022)**  
Students will learn about the concept of technology and how it evolves to meet the needs and wants of humans, explore how resources and innovation lead to development, evaluate the positive and negative impacts of technology, and learn and use the Engineering Design Process. Students will also apply coding and programming skills and problem-solving to make physical models respond to commands. Students will collaborate, communicate, think computationally, program, debug, and create models while learning to solve open-ended, real-life problems.

- 2) **BEGINNING BAND MS & CREATIVE THINKING A/B (ART1037A/ART1037B)**

This class is geared toward 6<sup>th</sup> grade students that played a band instrument in 4<sup>th</sup> and 5<sup>th</sup> grade as well as students with no prior experience. Students enjoy playing in our band program at Farquhar and meet daily as

a whole ensemble. Students with experience on one instrument may explore a secondary instrument, perform chamber music, or even learn to conduct the ensemble. Students will explore and perform many different types of music throughout the year. Many students become eligible for participation in All County Band and participate in Solo & Ensemble Festival. **This course counts toward both Fine Arts and Computational Learning for the Maryland School Report Card. Students enrolled in this class should remain enrolled for the entire school year to receive credit for both Fine Arts and Computational Thinking.**

### **3) BEGINNING ORCHESTRA MS & CREATIVE THINKING A/B (ART1038A/ART1038B)**

This class is geared toward 6th grade students that played an orchestra instrument in 4th and 5th grade as well as students with no prior experience. Students enjoy playing in our orchestra program at Farquhar and meet daily as a whole ensemble. Students with experience on one instrument may explore a secondary instrument, perform chamber music, or even learn to conduct the ensemble. Students will explore and perform many different types of music throughout the year. Many students become eligible for participation in All County Orchestra and participate in Solo & Ensemble Festival. **This course counts toward both Fine Arts and Computational Learning for the Maryland School Report Card. Students enrolled in this class should remain enrolled for the entire school year to receive credit for both Fine Arts and Computational Thinking.**

## **SPECIAL PROGRAMS**

### **ELD (English Language Development)**

English Language Proficiency (ELP) Levels 1 through 4 as determined by WIDA assessment and teacher recommendation.

### **MS ACADEMIC LITERACY 6 (ENG1029)**

This is 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 literature, and direct instruction in reading and writing skills. Students rotate between a small-group, teacher-directed lesson, a computer station for reinforcement and practice, and an independent reading center where students read books at his/her reading level. The program is designed to rapidly accelerate student achievement, with the goal of bringing them to grade level.

### **MATH 180 (MAT1010)**

This course is a comprehensive system of instruction, assessment, and professional development designed to help students struggling in mathematics. The program directly addresses individual needs through adaptive and instructional software, high-interest materials, and direct instruction in mathematical calculation and application skills.

### **RESOURCE 6 (Special Education) (NSS1007)**

Students who receive special education instruction in a resource program learn a variety of skills and strategies to build their skills for school success. This includes: organizational, test taking and time management skills. Sixth grade resource aims at supporting students in making a successful transition to middle school academically and socially. These strategies will help them attain their Individual Educational Plan (IEP) goals and objectives so that they can meet the academic demands of their content classes.

### **RELATED STUDIES 6 (NSS1005)**

This program is available to students who are having difficulty in the traditional program and require additional support. Instead of an elective, students enroll in this course to have focused, sustained instruction in learning strategies and skills that they will apply to their other classes. These strategies will help them meet

the academic demands of their content classes. *This class requires teacher recommendation and usually does not begin until the second semester.*

***\*NOTE: Final elective and special program course offerings are based on student enrollment and staffing availability. In some cases, electives may be combined 7<sup>th</sup> and 8<sup>th</sup> grade classes. Students enrolled in special programs will consult with their counselor to design the appropriate elective option.***

# GRADE 7

## AT A GLANCE

The 7th grade student's instructional program consists of a total of seven (7) classes that encompass educational growth, program continuity, and preparation for high school & college. This instructional program is achieved through a combination of required and elective courses, with options for advanced level programs and high school credit bearing courses:

- 1) **ADVANCED ENGLISH 7**
- 2) **GRADE 7 MATH, ACCELERATED MATH 7 PLUS OR GRADE 7 ALGEBRA 1**
- 3) **INVESTIGATIONS IN SCIENCE 7**
- 4) **HIST. INQUIRY WORLD STUDIES 7 OR HIST. INQUIRY GLOBAL HUMANITIES 7**
- 5) **PHYSICAL EDUCATION 7/HEALTH EDUCATION 7**
- 6) **FULL YEAR ELECTIVES:** French or Spanish 1A/1B, MS Academic Literacy 7, MS Band 2, MS Orchestra 2, Intro to Performing Arts
- 7) **HALF YEAR ELECTIVES:** MS Studio Art 2, MS Digital Art & Photography 2, MS Innovation & Engineering Design, Introduction to Chemistry, TV Studio 7

*Note: Students enrolled in special programs or opting out of World Language/Reading should consult with their counselor to choose the appropriate elective option.*

## ENGLISH

### ADVANCED ENGLISH 7 (ENG1012)

This course involves implementation of the StudySync English 7 curriculum. 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 7, 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. Students are awarded 10 SSL hours at the completion of English 7 for their full participation in SSL activities.

## MATH

### Grade 7 MATH (MAT1006)

The Grade 7 Math Course begins by studying scale drawings and makes use of grade 6 arithmetic understanding and skill. Students then build on their understanding of ratios to study proportional relationships and apply that knowledge to the study of circles. The first semester ends by building on percentage work started in grade 6 to include operations with multiple percentages involving decrease or increase in value. During the 2nd semester, significant learning occurs involving computation with rational numbers and solving more complex equations and inequalities. The course is completed by building on knowledge of angle relationships and the introduction of probability.

**ACCELERATED MATH 7+ (MAT1016)**

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 of 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.

**GRADE 7 ALGEBRA 1 (MAT2000A/MAT2000B)** - This is a high school course, in which students earn high school credit and take the state MCAP Assessment for Algebra. Students successfully completing this course take Curriculum 2.0 Honors Geometry in the 8th grade. In this course students 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.

**SCIENCE****INVESTIGATIONS IN LIFE SCIENCE (SCI1023)**

Students in the Investigations in Life Science course will develop an understanding of biology concepts related to the following topic areas: Cellular Structure and Processes, Matter and Energy Flow in Organisms, Inheritance and Variation of Traits, Evolution, and Ecosystems Interactions, Energy, and Dynamics. While each of these concepts will be taught in isolated units, Investigations in Life Science will also revisit related concepts throughout the school year to show the interconnected nature of biological sciences. 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.

**SOCIAL STUDIES 7****HISTORICAL INQUIRY IN WORLD STUDIES 7 (SOC1004)**

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

**HISTORICAL INQUIRY INTO GLOBAL HUMANITIES 7 (SOC1010)**

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

## **PHYSICAL & HEALTH EDUCATION**

### **PHYSICAL EDUCATION 7 (HPE1004)**

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, and communication. Students will have opportunities to:

- o Develop, maintain, and refine motor development.
- o Experience a variety of physical activities to meet each individual's fitness, skill and interest needs.
- o Participate in individual, dual, small and large group physical activities.
- o Recognize and deal positively with strengths and limitations while developing self-confidence, personal responsibility and individual initiative.
- o Study fundamental athletic skills and principles.

### **HEALTH EDUCATION 7 (HPE1001)**

Health education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills adopted from the National Health Education Standards. This course takes place during one quarter of the 7th grade school year and includes the following units of study: Mental & Emotional Health (MEH), Substance Use & Misuse Prevention (SUMP), Family Life & Human Sexuality (FLHS), and Disease Prevention & Control (DPC). There will be a parent/guarding information session regarding the content of the Family Life & Human Sexuality Unit prior to instruction in the fall.

## **7<sup>TH</sup> GRADE ELECTIVES**

All 7<sup>th</sup> grade students who are reading on grade level or higher are strongly encouraged to enroll in a world language as their first elective. This provides students with opportunities to be challenged at the highest level, while acquiring important skills necessary to compete in an interconnected global society. Students not reading on grade level are strongly encouraged to enroll in Academic Literacy as their first elective.

Please note: Final elective course offerings are based on student enrollment and staffing. In some cases, electives may be combined 7<sup>th</sup> and 8<sup>th</sup> grade classes. Students enrolled in special programs will consult with their counselor to design the appropriate elective option.

7th grade students may pick one of the following:

**Two Full Year Courses OR One Full Year Course and Two Semester Courses OR Four Semester Courses**

## **WORLD LANGUAGES - (FULL YEAR ELECTIVES - HIGH SCHOOL LEVEL CREDIT)**

### **HIGH SCHOOL WORLD LANGUAGE:**

Students begin to learn to communicate orally and in written form, and to derive meaning from the written and spoken language they are studying. The emphasis is on immersion, conversation, and vocabulary development, although simple grammatical structures are taught as a means to understanding and producing meaningful communication. Students will:

- o Apply language skills to real-life communication.
- o Communicate in simple terms about issues that surround them on a daily basis.
- o Learn about the culture of the people.
- o Make comparisons between their language and culture, and that of the language and culture they are

learning.

### **FRENCH A/B (WLG2041A/2041B) or SPANISH A/B (WLG2131A/2131B)**

This course option is identical to the MCPS high school class both in content and in pacing. Students take 1A/B in 7<sup>th</sup> grade and then, upon successful completion, continue into 2A/B in 8<sup>th</sup> grade. Taking this course series allows students to enter Level 3 in the ninth grade.

This course is appropriate for students who:

- o Were recommended by their English teacher
- o Work consistently and independently in a fast-paced learning environment and seek additional academic rigor
- o Are strong readers in English and have English grades of "A" or "B"
- o Can use advanced-level vocabulary and sentence structure in their verbal and written communications
- o Have excellent organization and study skills

#### **Notes:**

- *This is an accelerated course. Students who successfully complete this course receive a high school language credit, which is part of their high school graduation requirement. Students may wait until high school to take this course.*
- *Students who have previous experience speaking the language, speak the language at home, should see the World Languages Department Chairperson and their counselor for proper placement.*

## **MUSIC - (FULL YEAR ELECTIVES)**

### **MS BAND 2 (ART1034)**

This band class is open to students with 1 year of previous middle school band experience. Like Band 3, this group performs widely during the year at a moderate level, including a performance at Adjudication and Solo/Ensemble Festival. This band, combined with Band 3, represents Farquhar Middle School, participating in special public performances and enrichment field trips. The class works at a challenging pace designed to stimulate musical growth, development of leadership and achievement. Each year, members achieve the opportunity to qualify for participation in the Montgomery County Honors Band and Maryland Junior All-State Band.

### **MS ORCHESTRA 2 (ART1046)**

This orchestra is open to students with 1 year of previous middle school band experience. Like Orchestra 3, this group performs widely during the year at a moderate level, including a performance at Adjudication and Solo/Ensemble Festival. This orchestra, combined with Orchestra 3, represents Farquhar Middle School, participating in special public performances and enrichment field trips. The class works at a challenging pace designed to stimulate musical growth, development of leadership and achievement. Each year, members achieve the opportunity to qualify for participation in the Montgomery County Honors Band, Maryland Junior All-State Orchestra, the Potomac Valley, Maryland Classic and other area Youth Orchestra Programs.

### **INTRO TO PERFORMING ARTS: CHORUS, THEATRE, & GUITAR (ART1030)**

Embark on a year-long journey through the world of performing arts in this comprehensive course. The journey begins with a dedicated emphasis on essential choral singing techniques, leading to a group performance at the Winter Concert with the option to audition for select groups such as the MCPS All County Chorus and Maryland Junior All State Chorus. Post-Winter Concert, the focus shifts to the foundations of theater, encompassing improvisation, acting, and scene study, complemented by in-class performances. Finally, students will delve into the fundamental principles of playing the guitar across various styles and

genres. The culmination of this musical odyssey will be a group performance at the Spring Concert, showcasing the diverse talents cultivated throughout the course.

## **SEMESTER ELECTIVES (CHOOSE TWO OR FOUR)**

### **MS STUDIO ART 2 (ART1025)**

Creativity, innovation, critical thinking, communication, and collaboration continue to be developed throughout the course. Students in Studio Art 2 expand on their knowledge of materials and techniques. The theme of Relationships will guide students throughout the semester as they use personal reactions and responses to create meaningful artwork. Students will learn in a Teaching for Artistic Behavior style class (T.A.B.). This means that they choose the subject of their artwork, the media they will use, and the skills they will learn to complete their masterpieces. In a T.A.B. classroom, students are treated as artists instead of art students. Creativity, innovation, critical thinking, communication, and collaboration continue to be developed throughout the course. Studio 2 units include a variety of media such as drawing, painting, ceramics, sculpture, printmaking, and collage.

### **MS DIGITAL PHOTOGRAPHY 2 (ART1019)**

This course is designed for students to learn how to use a digital camera, upload pictures to a PC computer, and use the photo-editing software, *Photoshop CS6*. They will be able to adjust photographs and artistically transform them into a piece of artwork. Photographic quality printers and paper will be used for the final products.

### **MS INNOVATION & ENGINEERING DESIGN 7 (ENR1025)**

Students learn the importance of invention and innovation in technological development and apply engineering-thinking skills and technical skills to complete each step of the engineering design process to creatively address real-world challenges. Students explore technical drawing, computer-aided design, digital systems, and cybersecurity. Students use engineering design, troubleshooting, research and development, invention and innovation, and experimentation in problem-solving while learning to use and maintain technological systems.

### **MARINE GEOSCIENCE - MAGNET ELECTIVE (ENR1012)**

Students will explore topics of oceanography and its connection to atmospheric science. Students will explore the chemistry of the ocean, marine life and ecosystem dynamics, and how human activity impacts our ocean. Students will engage in lab activities throughout the semester and will focus on the Next Generation Science Standards. Students taking this elective science course should anticipate high school level rigor with some homework, be earning A's and B's in Algebra, have earned a 4 or 5 on the MCAP Math in the 2021 – 2022 the 2020 – 2021 school year, and have an interest in taking accelerated or advanced science courses in high school. Preference will be given to those who took the Intro to Chemistry elective in their 7th grade year. Teacher recommendations will also be taken into account for enrollment.

### **TV STUDIO 7 (AMC1004)**

In this course, students will be introduced to the basics of mass communication forms and processes. Students will begin to critically analyze media messages and will learn written and oral communication skills by producing content that informs, entertains, or persuades the viewing audience. TV Production also provides students with a preliminary introduction to some of the career possibilities in the television industry and fundamental technical and production roles.

## **SPECIAL PROGRAMS**

### **ELD (English Language Development)**

English Language Proficiency (ELP) Levels 1 through 4 as determined by WIDA assessment and teacher recommendation.

### **ACADEMIC LITERACY/DEVELOPMENTAL READING 7 (ENG1029)**

This is 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 literature, and direct instruction in reading and writing skills. Students rotate between a small-group, teacher-directed lesson, a computer station for reinforcement and practice, and an independent reading center where students read books at his/her reading level. The program is designed to rapidly accelerate student achievement, with the goal of bringing them to grade level.

### **MATH 180 (MAT1010)**

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

### **RESOURCE 7 (Special Education) (NSS1007)**

Students who receive special education instruction in a resource program will have focused sustained instruction in learning strategies and skills that they will apply to their other classes. These strategies will help them attain their Individual Educational Plan (IEP) goals and objectives so they can meet the academic demands of their content classes. The class supports academic planning such as: grade tracking/management, as well as executive functioning. Additionally, students practice study skills in relation to note taking.

### **RELATED STUDIES 7 (NSS1005)**

This program is available to students who are having difficulty in the traditional program and require additional support. Instead of an elective, students enroll in this course to have focused, sustained instruction in learning strategies and skills that they will apply to their other classes. These strategies will help them meet the academic demands of their content classes. *This class requires teacher recommendation.*

## GRADE 8

### AT A GLANCE

The 8th grade student's instructional program consists of a total of seven (7) classes that encompass educational growth, program continuity, and preparation for high school & college. This instructional program is achieved through a combination of required and elective courses, with options for advanced level and high school credit bearing courses:

- 1) **ADVANCED ENGLISH 8**
- 2) **GRADE 8 MATH, ALGEBRA 1 OR HONORS GEOMETRY A/B**
- 3) **INVESTIGATIONS IN PHYSICAL SCIENCE 8**
- 4) **ADVANCED U.S. HISTORY 8 OR HISTORICAL INQUIRY INTO AMERICAN STUDIES 8**
- 5) **PHYSICAL EDUCATION 8/HEALTH EDUCATION 8**
- 6) **FULL YEAR ELECTIVES:** HS World Language (French, Spanish 1A/B, French or Spanish 2A/2B), MS Academic Literacy/Developmental Reading 8, MS Band 3, MS Orchestra 3, Intro to Performing Arts, HS Tech Credit: Introduction to Engineering Design
- 7) **HALF YEAR ELECTIVES:** TV Studio 8, MS Studio Art 3, Forensic Science, MS Digital Art & Photography 3

**Note:** *Students enrolled in special programs or opting out of World Language/Reading should consult with their counselor to choose the appropriate elective options.*

## ENGLISH

### ADVANCED ENGLISH 8 (ENG1014)

This course involves the implementation of the StudySync English 8 curriculum. 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 8, 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.

## MATHEMATICS

### GRADE 8 MATH (MAT1007)

Students begin the Grade 8 Math Course with transformational geometry. They then apply the proportion relationship learning from 7th grade 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 6th grade 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.

**ALGEBRA 1 (MAT2000A/MAT2000B)**

This is a high school course, in which students earn high school credit and take the state MCAP Assessment for Algebra. In this course students 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.

**HONORS GEOMETRY A/B (MAT2004A/MAT2004B)**

This is a high school credit course, in which students earn honors level high school credit. It is designed for students who have successfully completed Algebra 1. Students successfully completing this course take Algebra 2 with Analysis in the 9th grade. Honors Geometry formalizes and extends students' geometric experiences from the elementary and middle school grades. Students explore more complex geometric situations and deepen their understanding of geometric relationships, progressing toward 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.

**SCIENCE****INVESTIGATIONS IN PHYSICAL SCIENCE (SCI1025)**

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 8****HISTORICAL INQUIRY IN US HISTORY 8 (SOC1005)**

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

**HISTORICAL INQUIRY INTO AMERICAN STUDIES 8 (SOC1020)**

This course is built around the core Grade 8 social studies curriculum, Historical Inquiry in US History 8, that includes historical content from colonization to post Civil War Reconstruction and Industrialization. In addition

to the content in the core curriculum, students will learn in greater depth about the social and cultural history of America including how the historical legacy of racism and discrimination continue to affect American society today. Students will also strengthen their writing through Document Based Questions, and enhance their learning through relevant literature connections. They will also participate in local or national competitions that allow them to connect their learning to broader themes of American democracy.

## **PHYSICAL & HEALTH EDUCATION**

### **PHYSICAL EDUCATION 8 (HPE1005)**

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, and communication. Students will have opportunities to:

- o Develop, maintain, and refine motor development.
- o Experience a variety of physical activities to meet each individual's fitness, skill and interest needs.
- o Participate in individual, dual, small and large group physical activities.
- o Recognize and deal positively with strengths and limitations while developing self-confidence, personal responsibility and individual initiative.
- o Study fundamental skills and principles.

### **HEALTH EDUCATION 8 (HPE1002)**

Health education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills adopted from the National Health Education Standards. This course takes place during one quarter of the 8th grade school year and includes the following units of study: Mental & Emotional Health (MEH), Substance Use & Misuse Prevention (SUMP), Healthy Eating (HE), Safety & Violence Prevention (SVP), and Family Life & Human Sexuality (FLHS). There will be a parent/guardian information session regarding the content of the Family Life & Human Sexuality Unit prior to instruction in the fall.

## **8<sup>TH</sup> GRADE ELECTIVES**

All 8<sup>th</sup> grade students who are reading on grade level or higher are strongly encouraged to enroll in a world language as their first elective. This provides students with opportunities to be challenged at the highest level, while acquiring important skills necessary to compete in an interconnected global society. Students not reading on grade level are strongly encouraged to enroll in Academic Literacy as their first elective.

Please note: Final elective course offerings are based on student enrollment and staffing. In some cases, electives may be combined 7<sup>th</sup> and 8<sup>th</sup> grade classes. Students enrolled in special programs will consult with their counselor to design the appropriate elective option.

***8th grade students may pick two full year courses OR one full year course and two semester courses OR four semester courses.***

## **WORLD LANGUAGES - (FULL YEAR ELECTIVES - HIGH SCHOOL LEVEL CREDIT)**

### **HIGH SCHOOL WORLD LANGUAGE:**

Students who took a language in 7th grade continue to develop the skills to communicate orally and in written form, and to derive meaning from the written and spoken language they are studying. Students who are taking a language for the first time in eighth grade will start the series from the beginning in level 1A. The

emphasis is on immersion, conversation, and continued vocabulary development. Students also learn more complex grammatical structures as an important means to understanding and producing meaningful communication. Students will continue to:

- o Apply language skills to real-life communication.
- o Communicate in the language about issues that surround them on a daily basis.
- o Learn about the culture of the people whose language they are studying.
- o Make comparisons between their language and culture, and that of the language and culture they are learning.

### **Option 1: FRENCH A/B (WLG2042A/WLG2042B) or SPANISH 2 A/B (WLG2132A/WLG2132B)**

This course is only open to students who have passed French or Spanish 1A/1B during the 7<sup>th</sup> grade year. Passing this course series allows students to enter Level 3 in 9<sup>th</sup> grade.

This course is appropriate for students who:

- o Were recommended by their 7<sup>th</sup> grade world language teacher
- o **Completed French or Spanish 1A/B with a C or better**
- o Work consistently and independently in a fast-paced learning environment and seek additional academic rigor
- o Can use advanced-level vocabulary and sentence structure in their verbal and written communications have excellent organization and study skills

### **Option 2: FRENCH 1 A/B (WLG2041A/WLG2041B) or SPANISH 1 A/B (WLG2131A/WLG2131B)**

This course is offered to students who are beginning world language in the 8<sup>th</sup> grade. This is appropriate for students who:

- o Were recommended by their English teacher and Reading teacher
- o Work consistently and independently in a fast-paced learning environment
- o Are strong readers in English and have English grades of C or higher
- o Can use advanced-level vocabulary and sentence structure in their verbal and written communications
- o Have excellent organization and study skills

### **Notes:**

- *This is an accelerated course. Students who successfully complete this course receive a high school language credit, which is part of their high school graduation requirement. Students may wait until high school to take this course.*
- *Students who have previous experience speaking the language, speak the language at home, should see the World Languages Department Chairperson and their counselor for proper placement.*

## **MUSIC - (FULL YEAR ELECTIVES)**

### **MS BAND 3 (ART1035)**

This band class is open to students with 2 years of previous middle school band experience or by teacher recommendation. Like Band 2, this group performs widely during the year, but at an advanced level, including performances at Adjudication and Solo/Ensemble Festival. This band combined with Band 2 represents Farquhar Middle School, participating in special public performances and enrichment field trips. The class works at a challenging pace designed to stimulate musical growth, development of leadership and achievement. Each year, members achieve the opportunity to qualify for participation in the Montgomery County Honors Band and Maryland Junior All-State Band.

### **MS ORCHESTRA 3 (ART1047)**

The string orchestra is open to students with 2 years of previous middle school orchestra experience or by

teacher recommendation. Like Orchestra 2, this group performs widely during the year, but at an advanced level, including performances at Adjudication and Solo/Ensemble Festival. This orchestra combined with Orchestra 2 represents Farquhar Middle School, participating in special public performances and enrichment field trips. The class works at a challenging pace designed to stimulate musical growth, development of leadership and achievement. Each year, members achieve the opportunity to qualify for participation in the Montgomery County Honors Orchestra, Maryland All-State Band, the Potomac Valley, Maryland Classic and other area Youth Orchestra Programs.

### **INTRO TO PERFORMING ARTS: CHORUS, THEATRE, & GUITAR (ART1030)**

Embark on a year-long journey through the world of performing arts in this comprehensive course. The journey begins with a dedicated emphasis on essential choral singing techniques, leading to a group performance at the Winter Concert with the option to audition for select groups such as the MCPS All County Chorus and Maryland Junior All State Chorus. Post-Winter Concert, the focus shifts to the foundations of theater, encompassing improvisation, acting, and scene study, complemented by in-class performances. Finally, students will delve into the fundamental principles of playing the guitar across various styles and genres. The culmination of this musical odyssey will be a group performance at the Spring Concert, showcasing the diverse talents cultivated throughout the course.

## **ENGINEERING - (FULL YEAR ELECTIVE - HIGH SCHOOL LEVEL CREDIT)**

### **INTRODUCTION TO ENGINEERING DESIGN (TEC2017A/TEC2017B):**

Introduction to Engineering Design™ (IED) is a high school-level course that is appropriate for students who are interested in design and engineering. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED allows students to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and understanding of the design process. It also allows students to develop strategies to enable and direct their learning, which is the ultimate goal of education.

Introduction to Engineering Design™ is one of three foundation courses in the Project Lead The Way® high school pre-engineering program. The course applies and concurrently develops secondary-level knowledge and skills in mathematics, science, and technology.

## **SEMESTER ELECTIVES (CHOOSE TWO OR FOUR)**

### **TV STUDIO 8 (AMC1004)**

In this course, students will continue to develop production skills and expand their aesthetic horizons. Students will critically analyze media messages and reinforce course concepts by producing a daily news broadcast and portfolio projects. Students will be challenged to think creatively, to function independently and as part of a group, to reason logically, to plan and anticipate, to deal with abstract, visual, and/or aural concepts, and to broaden their understanding of scientific advances and their part in modern technology. TV Production also provides students with a preliminary introduction to some of the career possibilities in the television industry and fundamental technical and production roles. Students in this course may film the daily televised announcements and if students film the daily televised announcements, they must fully participate as part of the production, camera, and news anchor teams.

**MS STUDIO ART 3 (ART1026)**

Students in studio Art 3 refine their skills and develop their artistic style, as they focus on the meaning behind their art pieces. Students improve craftsmanship and expand their creative processes through units in design, drawing, painting, ceramics, sculpture, printmaking, and collage. The theme of Influence will guide Studio Art 3 students as they further their knowledge of art history, cultural influence, and social messaging. Students will learn in a Teaching for Artistic Behavior style class (T.A.B.). This means that they choose the subject of their artwork, the media they will use, and the skills they will need to learn to complete their masterpieces. In a T.A.B. classroom, students are treated as artists instead of art students.

**MS DIGITAL PHOTOGRAPHY 3 (ART1022)**

This course is an advanced level art elective recommended for students who have successfully completed Digital Art & Photography 2. Students will continue to refine their technical and artistic skills as well as practice how to analyze and interpret photography. Photography 3 students will use the curricular art theme: **Influence** to guide conversations they will have when examining past and present artworks and when creating their own art. Students will use school provided digital SLR cameras and the photo-editing software Photoshop CS 6/ Photopea. Towards the end of this course students will have a solid portfolio that demonstrates a breadth of digital photography styles such as portraiture, landscape, light and shadow, still-life, and even explore macro-photography with miniature photo scenes they design themselves.

**INTRODUCTION TO FORENSIC SCIENCE - ADVANCED ACADEMIC ELECTIVE (ENR1015)**

Students get a comprehensive overview of forensic science including evaluation of evidence and crime scene investigation. Topics will develop alongside Investigations in Life Science including genetics, introductory chemistry, entomology, and use of biotechnology. Students will explore the differences between observations and inferences as they put themselves in the role of forensic scientists. Students will engage in lab activities throughout the semester, focusing on the Next Generations Science Standards practices. The course culminates with two case studies in which students must evaluate evidence to make a claim in solving the mysteries. Students taking this magnet elective science course should anticipate high school level rigor and regular homework. In addition, students should be earning A's and B's in both their Math and Science classes.

**SPECIAL PROGRAMS****ELD (English Language Development)**

English Language Proficiency (ELP) Levels 1 through 4 as determined by WIDA assessment and teacher recommendation.

**MS ACADEMIC LITERACY 8 (ENG1029)**

This course is 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 literature, and direct instruction in reading and writing skills. Students rotate between a small-group, teacher-directed lesson, a computer station for reinforcement and practice, and an independent reading center where students read books at his/her reading level. The program is designed to rapidly accelerate student achievement, with the goal of bringing them to grade level.

**MATH 180 (MAT1010)**

Math 180 is a comprehensive system of instruction, assessment, and professional development designed to help older, struggling students thrive in algebra. The program directly addresses individual needs through adaptive and instructional software, high-interest materials, and direct instruction in mathematical calculation

and application skills. Students rotate among a small group, teacher-directed lessons, a computer station for reinforcement and practice, and an independent brain arcade where student's complete math problems at their instructional level. Built with the student in mind, the learning experience is a uniquely motivating and fun way to accelerate to grade-level ability.

**RESOURCE 8 (Special Education) (NSS1007)**

Students who receive special education instruction in a resource program will learn strategies and skills through direct instruction and practice. Skills include: work study habits and academic skills, cooperative learning, use of technology, accessing rigorous curriculum, and self-advocacy. Students will have the opportunity to apply these strategies and skills in a variety of academic situations to attain their IEP goals and achieve academic success. Our goal is to equip students to become independent learners as they prepare for the transition to high school.

**RELATED STUDIES 8 (NSS1005)**

This program is available to students who are having difficulty in the traditional program and require additional support. Instead of an elective, students enroll in this course to have focused, sustained instruction in learning strategies and skills that they will apply to their other classes. These strategies will help them meet the academic demands of their content classes. *This class requires a teacher recommendation.*