

-----GRADE 6-----

AT A GLANCE

The 6th grade student's instructional program consists of a total of seven (7) classes. Educational growth, program continuity, and preparation for high school & college are 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
- 3) C2.0 MATH 6 OR APPLIED INVESTIGATIONS TO MATHEMATICS
- 4) INVESTIGATIONS IN SCIENCE 6
- 5) HIST. INQUIRY WRLD STUDIES 6 OR HIST. INQUIRY GLOBAL HUMANITIES 6
- 6) PE 6/HEALTH EDUCATION 6
- 7) ELECTIVE: *Arts Rotation, MS Band 6, MS Orchestra 6*

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

ENGLISH

ENGLISH 6/ADVANCED ENGLISH 6

Farquhar Middle School will be piloting the new English 6 curriculum which is currently being determined by MCPS.

MS DIGITAL LITERACY

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

MS ACADEMIC LITERACY 6

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.

MATHEMATICS

CURRICULUM 2.0 (C2.0) MATHEMATICS 6

The Curriculum 2.0 (C2.0) Math 6 program develops a deep understanding of mathematics by building a strong foundation of number sense in the grade-level content. Students who are successful in the grade-level content will be able to reach Algebra 1 by Grade 8 and an Advanced Placement course, such as AP Calculus, in high school. (*Units/Domains: Ratios & Proportional Relationships, The Number System, Expressions & Equations, Geometry, and Statistics & Probability*).

CURRICULUM 2.0 APPLIED INVESTIGATIONS TO MATHEMATICS (AIM)

This course is (highly recommended) for students who have successfully completed compacted 5/6 mathematics course. Curriculum 2.0 Investigations into Mathematics (IM) extends students' understanding of mathematical concepts developed in C2.0 Mathematics 6 and accelerates the pace of instruction to prepare for C2.0 Algebra 1. This course compacts all of the Grade 7 Common Core State Standards (CCSS) and much of the Grade 8 Common Core State Standards into a single year. Students who successfully complete C2.0 IM are prepared for C2.0 Algebra 1 in Grade 8. The remaining Grade 8 CCSS are compacted into the C2.0 Algebra 1 course. Instruction for C2.0 IM will focus on four critical areas (1) developing a unified understanding of number, recognizing fractions, decimals (including either those that have a finite or a repeating decimal representation), and percents as different representations of rational numbers; (2) using linear equations and systems of linear equations to represent, analyze, and solve a variety of problems; (3) comparing two data distributions and reasoning about differences between populations; (4) analyzing geometric relationships in order to solve real-world mathematical problems.

SCIENCE**INVESTIGATIONS IN SCIENCE 6 (IS6)**

IS6 is a problem/project-based curriculum. Instruction is interwoven around a relevant problem/project to allow a focus for student learning. Units studied in IS6 center around topics related to matter and its interactions, ecosystem dynamics, human impacts on the environment, energy, and waves. Students are awarded 10 SSL (Student Service Learning) hours at the completion of grade 6 science for their full participation in SSL activities.

SOCIAL STUDIES 6**HISTORICAL INQUIRY WORLD STUDIES 6**

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 GLOBAL HUMANITIES 6

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

PHYSICAL EDUCATION (PE) & HEALTH**PE Grade 6**

Middle school physical education instruction focuses on standards-based content that has been categorized into three measurement topics: health-related fitness, movement skills and concepts, and personal and social

responsibility. Students will engage in fitness testing, skill acquisition, and game-type activities during 3 quarters of their 6th 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 Grade 6

Comprehensive Health Education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills and lifelong wellness. This nine-week course includes the following units of study: Mental Health, Alcohol, Tobacco & Other Drugs, Personal & Consumer Health, and Safety & Injury Prevention.

6TH GRADE ELECTIVES – CHOOSE ONE

1) **Arts Rotation** (Four quarterly courses) OR 2) **Band 6** (Full Year) OR 3) **Orchestra 6** (Full Year)

1) **ARTS ROTATION:** Students will explore introductory courses that may include:

- **MS Studio Art 1**

Students will work with a variety of art materials, create drawing, painting, and sculpture projects, and will study master artists throughout history.

- **Computer Applications 6**

This course provides students with active learning experiences related to the productive use of computer-based applications. Students use word processing, presentation software, and research skills to complete projects. These courses focus on the selection and use of appropriate technology tools and resources to solve problems and accomplish a variety of tasks. Course outcomes are based on national and state technology standards, such as the Maryland State Technology Literacy Standards.

- **MS Digital Art and Photography 1**

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.

- **Technology and Design 6**

This course is an introduction to engineering. In this course, developed by the International Technology and Engineering Educators Association (ITEEA), students learn about the nature of technology and problem solving. Students recognize the relationships and the connections between technology and other fields of study and participate in engineering-design activities to understand how criteria, constraints, and processes affect designs.

2) **MS BAND 6**

Band 6 is open to any sixth grade student with an interest and an aptitude for learning a brass, woodwind, or percussion instrument. Students will continue to learn their musical instruments through rehearsal of band music. Participation in concerts is mandatory.

3) **MS ORCHESTRA 6**

The string orchestra is open to all students who play the violin, viola, cello, or string bass. For students wishing to begin one of these instruments, private lessons are recommended to coincide with classroom instruction. Participation in concerts is mandatory.

**Note: Final elective offerings will be based on the number of students choosing a particular elective and on staffing availability.*

SPECIAL PROGRAMS

ESOL (English for Speakers of Other Languages)

See course description under Special Programs on pages 17 & 18.

RESOURCE 6 (Special Education)

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 that they can meet the academic demands of their content classes.

RELATED STUDIES 6

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.

Note: 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. Educational growth, program continuity, and preparation for high school & college are achieved through a combination of required and elective courses, with options for advanced level programs:

- 1) ENGLISH 7 OR ADVANCED ENGLISH 7
- 2) C2.0 INVESTIGATIONS INTO MATHEMATICS OR ALGEBRA 1
- 3) INVESTIGATIONS IN SCIENCE 7
- 4) HIST. INQUIRY WRLD STUDIES 7 OR HIST. INQUIRY GLOBAL HUMANITIES 7
- 5) PE 7/HEALTH EDUCATION 7
- 6) FULL YEAR ELECTIVES: French or Spanish 1A/1B, MS Academic Literacy 7, MS Band 2, MS Orchestra 2, MS Chorus 2
- 7) HALF YEAR ELECTIVES: *MS Studio Art 2, MS Digital Art & Photography 2, Invention & Engineering 7, Introduction to Chemistry, TV Studio 7*

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

ENGLISH

ENGLISH 7

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 four units. It builds on the students' experiences in English 6 but involves greater rigor and challenge in its approach to the study of English. Teachers will implement the curriculum through the following thematic units:

UNIT 1: IDENTITY

UNIT 2: A SENSE OF PLACE

UNIT 3: PERSPECTIVES

UNIT 4: EXPRESSIONS

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. Anchor texts include multicultural, contemporary, and classic titles. The common tasks focus primarily on the writing process for three types of writing— argument, narrative, 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 the medium of technology. 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.

ADVANCED ENGLISH 7

This course is designed for able and motivated students with a lively interest in the power and versatility of language. 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.

MS ACADEMIC LITERACY 7

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.

MATHEMATICS

CURRICULUM 2.0 (C2.0) INVESTIGATIONS INTO MATHEMATICS

Curriculum 2.0 Investigations into Mathematics (IM) extends students' understanding of mathematical concepts developed in C2.0 Mathematics 6 and accelerates the pace of instruction to prepare for C2.0 Algebra 1. This course compacts all of the Grade 7 Common Core State Standards (CCSS) and much of the Grade 8 Common Core State Standards into a single year. Students who successfully complete C2.0IM are prepared for C2.0 Algebra 1 in Grade 8. The remaining Grade 8 CCSS are compacted into the C2.0 Algebra 1 course. Instruction for C2.0 IM will focus on four critical areas (1) developing a unified understanding of number, recognizing fractions, decimals (including either those that have a finite or a repeating decimal representation), and percents as different representations of rational numbers; (2) using linear equations and systems of linear equations to represent, analyze, and solve a variety of problems; (3) comparing two data distributions and reasoning about differences between populations; (4) analyzing geometric relationships in order to solve real-world mathematical problems.

CURRICULUM 2.0 (C2.0) ALGEBRA 1

This is a high school course, in which students earn high school credit and take the state PARCC Assessment for Algebra. Students successfully completing this course take Curriculum 2.0 Honors Geometry in the 8th grade. Students should have a recommendation from their 6th grade teacher before enrolling in this course (teacher recommendation indicated on the registration card). A TI-83 Plus or TI-84 graphing calculator is required. Units of study will support the new Algebra 1 Common Core State Standards.

This course is appropriate for students who:

- Successfully completed Investigations in Mathematics (IM) in the 6th grade.
- Are highly motivated, have superb work study habits, complete all homework, have the ability to think abstractly, work well independently, and have solid reading and writing skills.

SCIENCE

INVESTIGATIONS IN SCIENCE 7 (IS7)

IS7 is a problem/project-based curriculum. Instruction is interwoven around a relevant problem/project to allow a focus for student learning. Students engage in minds-on inquiry and hands-on explorations, productive discourse, and purposeful reading and writing. Units studied in IS7 center around topics related to cellular processes, structure and function in living things, genetics, Earth's history, and biological evolution. Students engage in science, technology, engineering, and mathematics (STEM) in order to propose solutions to identified problems.

SOCIAL STUDIES 7

HISTORICAL INQUIRY WORLD STUDIES 7

Through the study of world civilizations and global interactions from 1000 CE-1450 CE, students learn about political, economic, and social systems today. In addition to the MCPS course of study, advanced students

deepen their understanding of key concepts and events through reading, writing, document analysis, and historical thinking. These skills will be applied to each unit and students will be expected to show progress in skill development and historical knowledge in exams and historical document based projects. Greater emphasis is placed on the analysis of primary source material and images in this course to prepare students for the challenges of historical interpretation and analysis.

HISTORICAL INQUIRY GLOBAL HUMANITIES 7

This course is built around the core Grade 6 social studies curriculum, Historical Inquiry in World Studies 7, that includes historical content from civilizations of Latin America, Africa, and medieval Europe as well as global interactions following Columbian Exchange. Cohort students will go beyond this core as they learn additional content, explore deeper connections to today, engage in investigative inquiry to strengthen their writing through Document Based Questions, and enhance their learning through relevant literature connections. They will also participate in the National History Day (NHD) competition to research historical topics related to a NHD annual theme. (2019-2020 available at 20 middle schools).

PHYSICAL EDUCATION (PE) & HEALTH

PE Grade 7

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:

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

HEALTH Grade 7

Comprehensive Health Education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills and lifelong wellness. This nine-week course includes the following units of study: Mental Health, Alcohol, Tobacco & Other Drugs, Personal & Consumer Health, Family Life & Human Sexuality and Disease Prevention. A parent information session regarding the content of the Family Life & Human Sexuality Unit and the Disease Prevention Unit is conducted in the fall. Parents give passive consent for these two units unless a signed permission slip is given to the teacher indicating student opt out for either or both of them.

7TH GRADE ELECTIVES

All 7th 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.

Note: Students not reading on grade level are strongly encouraged to enroll in Academic Literacy as their first elective.

7th grade students may pick one of the following:

2 Full Year electives OR 1 Full Year elective and 2 Semester electives OR 4 Semester Electives

Final elective course offerings are based on student enrollment and staffing availability. In some cases, electives may be combined 7th and 8th grade classes.

WORLD LANGUAGES/READING - (FULL YEAR ELECTIVES)

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:

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

FRENCH or SPANISH A/B (Full year)

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

This course is appropriate for students who:

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

Note: Students who have previous experience speaking the language, speak the language at home, should see the World Languages Department Chairperson for proper placement.

MUSIC - (FULL YEAR ELECTIVES)

MS BAND 2

The band is open to those students who have had prior instrumental music instruction. Those students who wish to begin an instrument are welcome in this band class and should speak to the instructor prior to signing up. Instruction is offered on all band winds and percussion. Participation in concerts is mandatory. Accomplished wind and percussion players will have opportunities to represent Farquhar MS by their participation in the Maryland Solo/Ensemble Festivals and the MCPS and All-State Junior Honors Bands.

MS ORCHESTRA 2

The string orchestra is open to all students who play the violin, viola, cello, or string bass. For students wishing to begin one of these instruments, private instruction is recommended. There will be occasions when wind and percussion instruments will be added to the ensemble. Accomplished string players will have opportunities to represent Farquhar MS by their participation in the Maryland Solo/Ensemble Festivals and the MCPS and All-State Junior Honors Orchestras. Participation in concerts is mandatory.

MS CHORUS 2

Chorus is a year-long course that explores choral music from a wide variety of cultures and time periods including pop, folk, classic and jazz through study and performance. The Montgomery County Curriculum Framework emphasizes the basics of vocal technique, sight-reading, music theory, and music history along with a deeper understanding of musical elements (rhythm, melody, form, harmony, dynamics, expressive elements, tone color or timbre, articulation, and style.). Students will learn to sing expressively, responding to the conductor's cues. Students in Chorus are expected to participate in evening concerts as a major part of their grade.

SEMESTER ELECTIVES (SEMESTER ELECTIVES - CHOOSE TWO OR FOUR)

MS STUDIO ART 2

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. 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. Drawing and painting units require students to observe their environment in order to create final works that execute proper proportion, value and color mixing. When working three dimensionally, students use additive and subtractive techniques to build and personalize work

MS DIGITAL ART and PHOTOGRAPHY 2

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 make adjustments to photographs and artistically transform them into a piece of artwork. In addition to printing their work, students will download their photos to a flash drive that can be used as part of their high school portfolio. Photographic quality printers and paper will be used for the final products.

INVENTION AND ENGINEERING 7

Students develop an understanding of the cultural, social, economic, and political effects of technology; the role of society in the development and use of technology; and the influence technology has on history. Students use engineering design, troubleshooting, research and development, invention and innovation, and experimentation in problem solving while learning to use and maintain technological systems. Students will research, design, construct, and test their Sea Perch device (underwater robotics) to solve a natural or manmade disaster.

INTRODUCTION TO CHEMISTRY – MAGNET ELECTIVE

Students get a comprehensive overview of Introductory Chemistry. The topics covered include physical and chemical characteristics of matter, atomic structure and the periodic table, molecules and compound formation, properties of acids, bases, and solutions, and radioactivity. Students will engage in lab activities throughout the semester, focusing on the Next Generations Science Standards practices. Students taking this magnet elective science course should anticipate high school level rigor and regular homework. In addition, students should be earning As and Bs in Curriculum 2.0 Investigations in Mathematics advanced math course, have earned a 4 or 5 on the PARCC Math in 2018-2019 year, and have an interest in taking accelerated or advanced science courses in high school. Teacher recommendation will also be taken in account for enrollment.

TV STUDIO 7

In this course, students will be introduced to the basics of mass communication forms and process. 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

ESOL (English for Speakers of Other Languages) - Course description is provided on page 18.

RESOURCE 7(Special Education)

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.

RELATED STUDIES 7

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. Educational growth, program continuity, and preparation for high school & college are achieved through a combination of required and elective courses, with options for advanced level programs:

- 1) **Advanced English 8**
- 2) **Mathematics Curriculum 2.0 (C2.0) Algebra 1 or Honors Geometry**
- 3) **Investigations in Science 8**
- 4) **Advanced US History 8**
- 5) **PE 8/Health Education 8**
- 6) **Full Year Electives:** HS World Language (French, Spanish, or Italian 1A/B, French or Spanish 2A/2B, MS Academic Literacy 8, MS Band 3, MS Orchestra 3, MS Chorus 3)
- 7) **Half Year Electives:** Computer Science Discoveries 8, TV Studio 8, MS Studio Art 3, MS Digital Art & Photography 3, Technology Systems 8, Marine Geoscience 8

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

ENGLISH

ADVANCED ENGLISH 8

This course prepares students for advanced high school English courses by reading challenging texts and making connections with historical events and concepts developed in their Grade 8 U.S. History class. It is composed of two semester courses: Writing and Language 8A and Literature and Language 8B which is composed of three thematic units: UNIT 1: LITERATURE AS CRAFT, UNIT 2: LITERATURE IN CONTEXT, UNIT 3: LITERATURE AS ART

- **Writing and Language 8A**

The course focuses on developing the skills students need to communicate effectively for a variety of purposes, audiences, and media in a world in which the means for communication are rapidly changing. The writing class is a workshop: Students write every day, keep a portfolio to track progress and set goals, and explore ways to convey their own voice. They read as writers, analyzing short texts, practicing the writers' techniques, and imitating the style and sentence structures of published authors. They study literature and language as an integral part of the writing and revision process. Students write to explore their own thinking, engage in reflection, and learn each day that they have control over improving their craft.

- **Literature and Language 8B Literature and Language 8B**

The course centers on the study of language and literature as the vehicle of creative and critical thought that enables students to think about and understand the world. The focus shifts in second semester to a careful study of how professional writers create stories and use language in thoughtful and deliberate ways. Students read short stories, novels, nonfiction, drama, and poetry and explore how writers use the same techniques students have practiced in their own writing. Through careful reading of both print and non-print texts, students search for understanding and sometimes learn to be comfortable with ambiguity in a world of people who have both common and diverse experiences.

MS ACADEMIC LITERACY 8

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.

MATHEMATICS

CURRICULUM 2.0 (C2.0) ALGEBRA 1

This is a high school course, in which students earn high school credit. Students successfully completing this course take Curriculum 2.0 Geometry/Honors Geometry in the 9th grade. Students should have a recommendation from their teacher before enrolling in this course (teacher recommendation indicated on the registration card). A TI-83 Plus or TI-84 graphing calculator is required. Units of study will support the new Algebra 1 Common Core State Standards.

This course is appropriate for students who:

- Successfully completed Investigations into Mathematics (IM) in the 7th grade.
- Have the ability to think abstractly, work well independently, and have solid reading and writing skills.
- Attend and successfully completed the summer program, "Essentials for Algebra", if recommended by their 7th grade math teacher.

HONORS GEOMETRY A/B

This course is designed for students who have successfully completed Curriculum 2.0 Algebra 1. This is a high school level class. Students earn honors level high school credit and the grade earned in this course will go on the student's high school transcript. Students successfully completing this course take Algebra 2 with Analysis in the 9th grade. The units of study include the following: *Introduction to Geometry; Exploring Geometric Relations and Properties; Logic and Geometric Proofs; Right Triangle Relationships and Coordinate Geometry; Similarity and Trigonometry; and Measurement, Circles, and Patterns in Geometry and Algebra*. A TI-83 Plus or TI-84 graphing calculator is required.

SCIENCE

INVESTIGATIONS IN SCIENCE 8 (IS8)

IS8 is a problem/project-based curriculum. Instruction is interwoven around a relevant problem/project to allow a focus for student learning. Students engage in minds-on inquiry and hands-on explorations, productive discourse, and purposeful reading and writing. Units studied in IS8 center around topics related to Forces and Motion, Astronomy, Weather and Climate, and Earth's Materials and Processes. Students engage in science, technology, engineering and mathematics (STEM) in order to propose solutions to identified problems.

SOCIAL STUDIES 8

ADVANCED U.S. HISTORY GRADE 8* (*All FMS Grade 8 students will be enrolled in this course*)

The curriculum in grade 8 Advanced U.S. History provides a firm foundation in the structures and concepts of geography, economics, politics and cultures while studying U.S. history from 1763-to the post-Reconstruction era. 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. This course enhances the four MCPS Grade 8 U.S. History units through the development of skills from high school Advanced Placement courses in history.

PHYSICAL EDUCATION (PE) & HEALTH

PE Grade 8

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:

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

HEALTH EDUCATION Grade 8

Comprehensive Health Education promotes positive health-related attitudes and behaviors that support self-reliance and self-regulation while developing health literacy skills and lifelong wellness. This nine-week course includes the following units of study: Alcohol, Tobacco & Other Drugs, Personal & Consumer Health, Safety & Injury Prevention, Nutrition & Fitness, and Family Life & Human Sexuality. A parent information session regarding the content of the Family Life & Human Sexuality Unit is conducted in the fall. Parents give passive consent for this unit unless a signed permission slip is given to the teacher indicating student opt out for it.

8TH GRADE ELECTIVES

All 8th grade students who are reading on grade level or higher are strongly encouraged to enroll 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 Reading 8 or READ 180 as their first elective.

8th grade students may pick two full year electives OR 1 full year elective and 2 semester electives OR 4 semester electives

WORLD LANGUAGES & READING

(Full Year Electives)

HIGH SCHOOL WORLD LANGUAGE:

Students who took a language in seventh 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:

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

Option 1: FRENCH or SPANISH 2 A/B

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

This course is appropriate for students who:

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

Option 2: FRENCH or SPANISH 1 A/B

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

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

MS BAND 3

The band is open to those students who have had prior instrumental music instruction. Those students who wish to begin an instrument are welcome in this band class and should speak to the instructor prior to signing up. Instruction is offered on all band wind and percussion instruments. Participation in concerts is mandatory. Concerts may occur on weekends and evenings. Very Accomplished wind and percussion players will have opportunities to represent Farquhar MS by their participation in the Maryland Solo/Ensemble Festivals, the MCPS Junior Honors Band, and the Maryland Junior Honors Band.

MS ORCHESTRA 3

The string orchestra is open to all students who play the violin, viola, cello, or string bass. For students wishing to begin one of these instruments, private instruction is strongly recommended. There will be occasions when wind and percussion instruments will be added to the ensemble. Participation in concerts is mandatory. Concerts may occur on weekends and evenings. Very Accomplished string players will have opportunities to represent Farquhar MS by their participation in the Maryland Solo/Ensemble Festivals and the MCPS and All-State Junior Honors Orchestras.

MS CHORUS 3

Chorus is a year-long course that explores choral music from a wide variety of cultures and time periods including pop, folk, classic and jazz through study and performance. The Montgomery County Curriculum Framework emphasizes the basics of vocal technique, sight-reading, music theory, and music history along with a deeper understanding of musical elements (rhythm, melody, form, harmony, dynamics, expressive

elements, tone color or timbre, articulation, and style.). Students will learn to sing expressively, responding to the conductor's cues. Students in Chorus are expected to participate in evening concerts as a major part of their grade.

SEMESTER ELECTIVES (SEMESTER ELECTIVES - CHOOSE TWO OR FOUR)

TECHNOLOGY SYSTEMS 8

Technology Systems is designed to introduce students to systems and processes to develop an understanding of the impact of technology on humans, the environment, and the global community. By investigating systems through their function, design, and development, students will understand what systems are, why they are developed and how 'systems thinking' can be used to describe them. Students engage in activities and experiences where they evaluate the impacts of technology through the lenses of culture, society, economics and the environment.

MARINE GEOSCIENCE - MAGNET ELECTIVE

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, exchanges of gases and toxins between the oceans and atmosphere, and how human activity impacts both our ocean and atmospheric systems. 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 As and Bs in Algebra, have earned a 4 or 5 on the PARCC Math in 2018-2019 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 recommendation will also be taken in account for enrollment.

TV STUDIO 8

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. *Teacher recommendation is required.*

MS STUDIO ART 3

Students Studio Art 3 refine their skills and develop their own artistic style. 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 explore the role of artists in the past and their influence on contemporary society. Studio Art 3 students grow to explore conceptual art as well as their personal artistic voice. Communication and collaboration are further refined throughout the course as students learn to align their technical skills and their creative thinking skills.

COMPUTER SCIENCE DISCOVERIES 8

Computer Science Discoveries (CS Discoveries) is an introductory Code.org® computer science course that engages and empowers all students, regardless of background or prior experience, to solve problems, communicate, create projects and artifacts and have fun using computer science. Students are introduced to

coding languages appropriate for beginners as well as more complex projects for students with more experience. Using App Lab, Game Lab environments, students will progress from blocks to typed coding and learn JavaScript. Students successful in this course will be prepared for AP Computer Science Principles high school course

MS DIGITAL ART and PHOTOGRAPHY 3

Students will be introduced to the basic technology necessary for the production of their art work, as well as learning about the visual arts, how to look at and critique photography, photographic vocabulary, using tools such as framing, composition, "rule of thirds", light, texture, pattern, lines, symmetry, depth of field, distance, perspective, culture, space, balance, color and black and white photography, and be introduced to many works by well-known photographers. The editing software for this course will be Photoshop CS 6. The students will leave the course with a digital portfolio that can be used in high school and beyond.

SPECIAL PROGRAMS

RESOURCE (Special Education)

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.

RELATED STUDIES 8

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.

Note: Students enrolled in special programs or opting out of reading/world language will consult with their counselor to design the appropriate elective option.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)

ESOL LEVEL 1 MS

This course is designed to teach English as a new language to ESOL students at the *Entering* English language proficiency level. The four skill areas of reading, writing, listening, and speaking are program integrated as students practice oral and written language in an academic context. Students have various learning activities that emphasize vocabulary development and oral fluency.

ESOL LEVEL 2 MS

This course is designed to teach English as a new language to ESOL students at the *Emerging* English language proficiency level. Students continue to develop proficiency in four skills areas of reading, writing, listening, and speaking are integrated as students practice oral and written language in a variety academic contexts. Learning experiences are provided to support students as they read informational and literary texts. Students also learn to respond to factual questions and write paragraph summaries about their readings.

ESOL LEVEL 3 MS

This course is designed to teach English as a new language to ESOL students at the *Developing* English language

proficiency level. The four skills areas of reading, writing, listening, and speaking are integrated as students practice oral and written language in an academic context. Students at this level of language proficiency understand basic vocabulary dealing with everyday home and school life. Students learn to analyze reading passages and respond to both factual and inferential questions as they read and discuss both literary and informational texts.

ESOL LEVEL 4 MS

This course is designed to teach English as a new language to ESOL students at the *Expanding* English language proficiency level. The four skills areas of reading, writing, listening, and speaking are integrated as students practice applying language using a variety of academic functions, academic vocabulary, and grammatical structures, in context, both orally and in writing for a variety of academic purposes in discourse. Students practice using various reading strategies while reading a variety of literary and informational texts. Students practice writing single-text and multiple-paragraph essays.

ESOL LEVEL 5 MS

This course is designed to teach English as a new language to ESOL students at the *Bridging* English language proficiency level. Students practice applying language in the four skills areas of reading, writing, listening, and speaking both orally and in writing during extended discourse. As students expand their vocabulary and increase their control of English, they practice using sophisticated sentence structures by connecting ideas and combining sentences to form compound or complex sentences, in context, when speaking and writing. Students focus on expressing their ideas in a paragraph format. Emphasis is placed on forming introductory and concluding paragraphs. Students employ the writing process to produce five-paragraph essays.