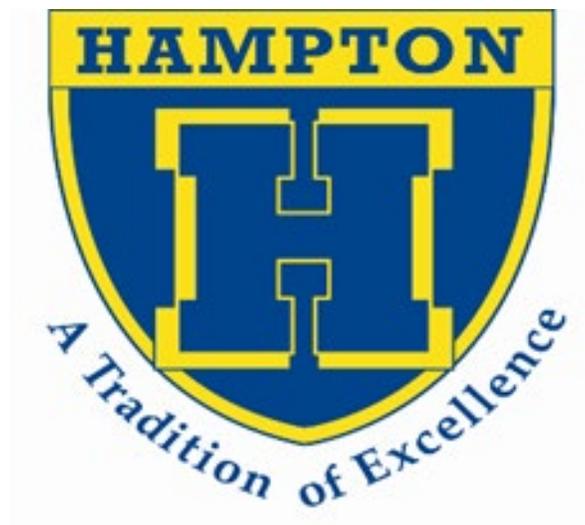


Hampton Middle School



Program of Studies
2021-2022

Hampton Middle School is designed specifically to allow all children to transition from childhood into adolescence. During these three years, students will be given opportunities to experience many disciplines taught by a strong core of teachers who work together to integrate their courses. The administrators, teachers, and counselors will constructively guide and reinforce each student as he or she explores a changing world and self.

This program of studies provides an overview of the Hampton Middle School curriculum with brief descriptions of the planned courses for each grade. Please review the following guide. If you have questions, please feel free to contact any of the people listed below:

Hampton Middle School Administration/Staff

Dr. Marlynn Lux, Principal.....	412-492-6357
Ms. Renee Michalowski, Administrative Assistant to the Middle School Principal.....	412-492-6356
Dr. Michael Silbaugh, Assistant Principal.....	412-492-6358
Ms. Lisa Riddell, Administrative Assistant to the Middle School Assistant Principal....	412-492-6355
Mrs. Danielle Wike, School Counselor.....	412-492-6360
Mrs. Jill Kampmeyer, School Counselor.....	412-492-6359
Mrs. Jessica Barry, Administrative Assistant to the Middle School Counselors.....	412-492-6372
Mrs. Amy Baxter, Nurse.....	412-492-6361
Mrs. Michelle Silberman, Health Office Assistant.....	412-486-6000 Ext. 2102
Dr. Diane Fierle, Library/Media Specialist.....	412-492-6362
Mrs. Jennifer Januck, Library Assistant.....	412-486-6000 Ext. 2002

High School Administration

Dr. Marguerite Imbarlina, Principal.....	412-492-6378
Mrs. DeeDee Dorenkott, Administrative Assistant to the High School Principal....	412-492-6376
Mr. Joshua Cable, Assistant Principal.....	412-492-6377
Mr. Joseph Sebestyen, Assistant Principal.....	412-492-6383
Mrs. Lisa Graff, Administrative Assistant to the High School Assistant Principals.....	412-492-6375
Mrs. Lisa DeKort, Attendance Administrative Assistant.....	412-492-6399
Mrs. Kimberly Cavitt, Counselor 10 th & 12 th Grades (A-K).....	412-492-6380
Mr. Matthew Combi, Counselor 9 th & 11 th Grades (A-K).....	412-492-6381
Mrs. Terri Koprivnikar, Counselor 9 th & 11 th Grades (L-Z).....	412-492-6382
Mrs. Marlie Stein, Counselor 10 th & 12 th Grades (L- Z).....	412-492-6334
Mrs. Dolores Breslawski, Administrative Assistant to the High School Counselors.....	412-492-6379
Mr. William Cardone, Athletic Director.....	412-492-6389
Mrs. Bridgett Gibbons, Administrative Assistant to the Athletics Director... ..	412-486-6000 Ext. 1514

The Academic Environment

The Middle School encompasses grades six, seven and eight. In all grade levels, the academic teachers employ a team approach. By bringing together several teachers and a common group of students, teaming creates a small, caring family which ensures that no student will go unnoticed.

The five academic teachers work together as a team to coordinate curriculum, plan interdisciplinary activities and share insights about the progress and needs of each student. Students also pursue art, family and consumer science, computer science, health and technology education through the rotation classes. Music and physical education are also important components of our program, as the students rotate these classes every other day.

In the eighth grade, the students will have the opportunity to choose semester classes, which helps students to identify their passions and pursue them. These semester classes allow students to explore areas of interest, such as band, orchestra, chorus, art, advanced physical education, computer programming, robotics, engineering, etc. Students will also continue with their rotation classes. Additionally, most students will be required to schedule a level one-world language.

In each grade level, every student is assigned a tutorial period. Academic teachers proctor the tutorial sessions, which gives students the opportunity for instructional support and/or enrichment from every academic discipline.

School Counseling Services

Middle School counselors fulfill a vital role in helping students to meet their personal, social, educational, and career needs. The counselors use their expertise to provide counseling, instruction, consultation, prevention and intervention services in order to help students make informed, positive choices. As Middle School students gain knowledge and learn effective processes, each individual will be empowered to create a quality life for him/herself.

Career Exploration is also part of the Middle School counseling program. Through the use of *Naviance* and *PA Career Zone*, students are able to begin investigating potential future career options. Through *Career Awareness*, one of the eighth grade rotations, students research career options using the tools available through the online programs.

Middle School counselors play important roles in the Advisory and Bullying Prevention Program. They work with the teachers to establish the lessons being offered to students. Lessons pertain to preventing and reporting incidents of bullying, cyber-bullying and how those topics relate to interpersonal relationships among Middle School Students.

Counselors also prepare eighth graders for the high school scheduling process. They work in conjunction with the High School School Counselors to help to create a smooth transition from the Middle School to the High School.

PSSA and Keystone Exams

Currently, students in grades 3-8 are required to take PSSA tests in the spring of each school year. Additionally, students are required to take Keystone exams as end-of-course tests in Algebra I, Biology, and Literature. Since many of our students take Algebra I during the Middle School years, the Algebra I Keystone exam will be administered as the students complete the course. Students who do not score proficient on any of the exams will work with their counselor and administration to create an individualized graduation plan based on the implementation of Act 158 and beginning with the class of 2023.

Advanced Math Courses and Honors Courses

We encourage all students to stretch and take the most rigorous courses possible. Honors and advanced courses provide such opportunities. While encouraging students to stretch, we also want to ensure that they are successful; consequently, teachers and counselors utilize a placement rubric. The rubric includes PSSA, local assessments, grades in current courses, teacher recommendations on work ethic, and scores on quizzes and tests. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric. The appropriate form can be obtained from the counselors' office, which will be reviewed by the principal. Please note that this petition process will only apply to taking the honors level of a course and not to the acceleration of a full grade level.

If a student is able to demonstrate mastery of prerequisite courses, then the student may elect to enroll in the next course in the mathematics sequence.

Examples of the mastery of the prerequisites may be achieved for each of the math courses by the following:

Math 6: Students may study this course privately; however, in August, the student must take and pass the final placement exam with a score of at least 80%.

Pre-Algebra: The student must take a Pre-Algebra course through an accredited institution (online or face-to-face), or the student may study the course privately. If the student studies privately for the course, in August, the student must take and pass the final placement exam with a score of at least 80%.

Algebra I: The student must take the Algebra I course through an accredited institution (online or face-to-face). In this case, the Algebra I course will be listed on the student's high school transcript. Students will have to take the Algebra I Keystone exam during the next testing window.

Library/Media Center

K – 12 Library/Media Curriculum

The mission of the Hampton Middle School Library/Media Center is to ensure that students are lifelong learners and effective users of ideas and information.

The Library/Media Center program encourages students to read and appreciate literature by maintaining a diverse collection that supports the educational, informational and recreational needs of our Middle School students.

Our Library/Media Center serves as a learning commons where students come together to collaborate and examine ideas, create new knowledge and share that knowledge with others. It provides students with 21st century learning skills and encourages them to become independent users of ideas and information.

Library/Media Specialists and Teachers:

- Work collaboratively to develop a curriculum that provides the students opportunities to acquire information literacy skills.
- Investigate and disseminate current information to enhance district curricula.
- Work cooperatively to acquire materials that supplement classroom learning.
- Participate in collaborative efforts with other libraries and institutions to expand available resources.

COURSE DESCRIPTIONS

6th Grade Academic Courses

English

English 6

0651

GRADE 6

2 Semesters

Sixth grade English is designed to enable the student to gain proficiency in the following modes of writing: informative, argumentative, and narrative. Students study grammar and mechanics and work toward varying sentence structure and improving word choice. Students are introduced to new vocabulary in order to enhance their writing and build their word knowledge. There is an emphasis on constructing a well-developed multi-paragraph piece. Careful attention is given to the introduction and concluding paragraphs in essays. To promote a uniform English Language Arts program, Reading and English collaborate on a variety of topics, assignments, and assessments.

Reading

Reading 6

0621

GRADE 6

2 Semesters

The sixth grade Reading course is a literature-based program with design and delivery focusing on student proficiency in vocabulary and reading comprehension skills. In alignment with the English Language Arts (ELA) PA Core Standards, students apply strategic flexibility as they read, understand, and respond to literature and informational text. Instruction emphasizes growth in the interpretation and analysis of text based on text evidence, as well as the capacity for making connections within and between texts. As an integrated ELA program, reading and English teachers collaborate on a variety of topics, assignments, and assessments. Additionally, teachers incorporate research-based methods and materials to address the academic needs of a diverse population of students. Among the materials used are a literature anthology, novels, supplemental resources, and a variety of technology tools.

History

Geography & Ancient History 6

0641

GRADE 6

2 Semesters

Sixth graders will spend the first portion of the course learning about the unique geographical features of our planet. The major themes of this portion of the course are: Location, Place, Human-Environment Interaction, Movement and Region. While studying these themes, students will develop vocabulary specific to geography and foundational map skills. After this focused study of geography, students will apply this information as they are chronologically introduced to the rise of ancient civilizations of Mesopotamia, Egypt, Greece and Rome. In addition to the newly acquired geography skills, students will investigate the economics, sociology, politics and history of the regions. This course is infused with technology, streamed videos and online resources.

Math

The Middle School math teachers understand the unique development of our students. In a subsequent year, it is possible for a student who demonstrates mathematical proficiency and motivation to move into a more advanced math course.

Math 6

0611

GRADE 6

2 Semesters

This course is designed to aid students in building an understanding of math skills and concepts through visualization and pictorial representations. Once students have a solid understanding, they will then move on to symbolic representations. Student activities focus on positive and negative numbers, multiplying and dividing fractions and decimals, ratios, rate, percent, algebraic expressions, equations and inequalities, the coordinate plane, area, perimeter, surface area and volume of 2- and 3- dimensional figures, as well as an introduction to statistics. Multiple methods of assessment will be utilized to shape the students' mathematical experiences. The major focus of this course is to build confidence in problem solving.

Prerequisite: Math 5

Advanced Pre-Algebra

1711

GRADE 6

2 Semesters

The Advanced Pre-Algebra approach allows for a deeper exploration into algebraic concepts. These concepts consist of arithmetic operations with fractions, decimals and percentages, ratios and proportions, solving equations and inequalities, and spatial reasoning and geometry. There is also an introduction to coordinate geometry. These concepts will allow the students to appreciate the use of algebra in everyday situations. Technology will be appropriately utilized to facilitate conversation, discussion and debate in the classroom.

Prerequisite: Math 6

Science

Science 6

0631

GRADE 6

2 Semesters

The sixth grade Science course develops thinking and problem solving skills through a variety of multi-faceted lab investigations and cooperative group learning experiences. Topics taught include: The Nature of Science (tools and measurement), Terminal Velocity - Motion (forces, fluids, energy, machines and work), Chemistry Introduction, Tectonic Fury- Earth Science (rocks and minerals, erosion and weathering, volcanoes and earthquakes, plate tectonics, fossils, geologic time, and some oceanography), Monster Storms (Meteorology and Atmosphere) and Watersheds.

6th Grade Physical Education

Physical Education

GRADE 6

2 Semesters - Alternating Days

The sixth grade Physical Education Program is an introduction to Middle School Physical Education concepts. This course focuses on lifetime fitness, team sports, and health components. The students will participate in a variety of activities such as: cardiovascular conditioning, games, team sports and introductory weight training. In addition to traditional skills, students will be introduced to cooperative challenges/activities.

6th Grade Performing Arts

Orchestra

0661

GRADE 6

2 Semesters

Sixth Grade Orchestra is a musical ensemble with public performance as the primary goal. Students will work on individual instrumental technique, as well as ensemble technique. Students will also learn about music, composition, theory and history through study of the concert music selections. Opportunities exist to participate in various honors ensembles and groups throughout the year. Students must currently participate in the fifth grade orchestra or pass an audition with the orchestra director to participate. The orchestra performs three concerts every school year. Attendance and participation at these concerts is mandatory. This ensemble rehearses every other day plus one (1) full rehearsal per week during tutorial.

Chorus

0664

GRADE 6

2 Semesters

Sixth grade students may elect to take part in the chorus. Vocalists will perform music of various cultures throughout history, while learning about vocal production, singing in unison, 2-part harmony and singing in languages other than English. Chorus students will have written and singing assessments throughout the course. These assessments will be used to help the students improve note reading, singing, and general musicality. Chorus students will meet on an every other day basis. Chorus members' participation is mandatory in three (3) concerts during the school year.

Band

0667

GRADE 6

2 Semesters

Sixth Grade Band is a music course selection that has quality musical performance as a primary objective. This course is designed to improve a student's proficiency on a band instrument (woodwind, brass, percussion) with an emphasis on performance in a large group. Personal musicianship is developed through ear training, rhythm training, interpretation of dynamics, and listening. Core goals of ensemble work are to encourage creativity and self-expression, support instrument development and provide an atmosphere that fosters positive self-esteem.

Attendance at all performances is required. This ensemble rehearses every other day plus one (1) full rehearsal per week during tutorial. Membership is open only to students with elementary band experience or teacher recommendation.

Beginner's Band

0666

GRADE 6

2 Semesters

Sixth Grade Beginner's Band is a music course selection for students who have no previous band experience. Emphasis will include study of instrument technique, music theory, ear training and rhythm training. Students must be prepared for class with instrument, music, and pencil. The instrument must be rented, borrowed or purchased prior to the beginning of the course. Students will be expected to dedicate a minimum of 75 out-of-school practice minutes per week. The performance goal for this course is participation in the May concert.

Beginner's Strings

0660

GRADE 6

2 Semesters

Sixth Grade Beginner's Strings is a music course selection for students who have no previous strings experience. Emphasis will include study of instrument technique, music theory, ear training and rhythm training. Students must be prepared for class with instrument, music and pencil. The instrument must be rented, borrowed or purchased prior to the beginning of the course. Students will be expected to dedicate a minimum of 75 out-of-school practice minutes per week. The performance goal for this course is participation in the May concert.

Music Appreciation I

0669

GRADE 6

2 Semesters

Music Appreciation I is required for sixth graders who are not enrolled in a performance ensemble. This course is designed to give students an overall understanding of music and provide ensemble experience in World Drumming. An appreciation and comprehension of music from all time periods is the primary objective. Music Appreciation I will meet every other day.

6th Grade Rotations

Computer Applications I

GRADE 6

7.5 Weeks

Computer Applications I is based on the Computer Science for Innovators and Makers curriculum, which is a Project Lead the Way course. In this course, students will discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout this rotation, students will learn about programming for the physical world by blending hardware design and software development. Students will use computational thinking practices to design and develop a physical computing device driven by a microcontroller. The code that brings their physical designs to life will be created and debugged by students as they follow the engineering design process. Digital citizenship and keyboarding skills will be infused in the course.

Family and Consumer Science

GRADE 6

7.5 Weeks

This course will introduce Family and Consumer Sciences (FCS) to middle school students. Students will take part in hands-on activities designed to help them develop life management skills. Throughout the course, students learn the importance of teamwork, through their lab work in the kitchen. They focus on basics relating to measuring, equipment and tools, safety and sanitation, as well as basic food preparation. Students also learn how to use a sewing machine and follow basic directions to create a product.

Health I

GRADE 6

7.5 Weeks

Health I includes the following units of study: Health and Wellness, Decision Making, Self-Esteem, Body Image, Caring for your Body, and Understanding Drugs, Tobacco and Alcohol. This course will prepare students to begin and/or maintain healthy life habits.

Introduction to Technology Education

GRADE 6

7.5 Weeks

Introduction to Technology introduces students to the engineering design process in order to understand how criteria, constraints, and processes affect designs. In this course, students will develop skills in researching and communicating design information. This course is designed as the first step of three in making students technologically literate in today's ever-changing technological world. In this course, students will learn about why we study technology, concepts of technology, design, the engineering design process, and how to work safely and efficiently with others in a lab environment. The students will apply the knowledge they have gained to develop possible solutions to problems encountered while creating various projects.

Visual Arts I

GRADE 6

7.5 Weeks

As students transition into middle school, they will learn to value the process of creating and the vital role of practice in refinement. Students will use tools and resources as well as their own experiences and skills to create art. The elements and principles of design will be used as tools for artistic expression in two and three-dimensional forms. Studio work may involve drawing, watercolor painting, fiber arts and clay.

7th Grade Academic Courses

English

English 7

0751

GRADE 7

2 Semesters

Seventh grade English builds skills within all modes of communication, including reading, writing, speaking, and listening. At the beginning of the year, students will study, practice, and refine the strong public speaking skills that are foundational to success across courses and throughout their lives. As writers, students will continue to study, practice, and improve sentence structure, word choice, and coherence in written work. A major emphasis is placed upon continuing to develop a robust facility for writing simple, compound, and complex sentences in order to improve clarity and flow. Students will research and write effective multi-paragraph essays for argumentative, narrative, and informational writing. Often through interdisciplinary work with Reading or History classes, students will create and present a series of projects to practice and refine their reading, writing, speaking, and technology skills. Literature, including diverse nonfiction texts, is used as a vehicle to promote and refine analytical, critical thinking, and close reading skills, while also providing a springboard for written and oral reflections and discussions.

Reading

Reading 7

0721

GRADE 7

2 Semesters

The seventh grade Reading course is a literature-based program with design and delivery focusing on student proficiency in vocabulary and reading comprehension skills. In alignment with the English Language Arts (ELA) PA Core Standards, students apply strategic flexibility as they read, understand, and respond to literature and informational text. Instruction emphasizes continued growth in the interpretation and analysis of text based on text evidence, as well as the capacity for thinking critically to make connections within and between texts. As an integrated ELA program, reading and English teachers collaborate on a variety of topics, assignments, and assessments. Additionally, teachers incorporate research-based methods and materials to address the academic needs of a diverse population of students. Among the materials used are a literature anthology, novels, supplemental resources, and a variety of technology tools including online resources, Google Classroom, and specific sites for research purposes.

History

Medieval World History 7

0741

GRADE 7

2 Semesters

The seventh grade Medieval World History curriculum concentrates on the development of world history and geography from the Roman Empire to the Age of Exploration. The course includes the study of Europe, Asia, Africa and the Americas. The disciplines of geography, economics, sociology and government are examined to emphasize the themes of history and the underlying concepts that unify historical events. The class will focus on reading, writing and map skills, which are integral parts of the curriculum. The course is infused with technology with teachers using Wikispaces, streamed videos, online educational programs and web quests to further engage student in the learning process.

Math

The Middle School math teachers understand the unique development of our students. In a subsequent year, it is possible for a student who demonstrates mathematical proficiency and motivation to move into a more advanced math course. When considering and planning for future course selections, please consult the high school math pathways chart available as a reference in the Appendix on Page 45.

Advanced Pre-Algebra

0711

GRADE 7

2 Semesters

The Advanced Pre-Algebra approach allows for a deeper exploration into algebraic concepts. These concepts consist of arithmetic operations with fractions, decimals and percentages, ratios and proportions, solving equations and inequalities, and spatial reasoning and geometry. There is also an introduction to coordinate geometry. These concepts will allow the students to appreciate the use of algebra in everyday situations. Technology will be appropriately utilized to facilitate conversation, discussion and debate in the classroom.

Criteria for Recommendation: 1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.

Prerequisite: Math 6

The seventh grade Pre-Algebra course teaches students the knowledge of structure, functioning and reasoning in the mathematical process. Significant mathematical topics such as arithmetic operations with fractions, decimals, percents, ratios and proportions, equation solving, spatial reasoning and geometry, and an introduction to coordinate geometry are presented so that students have the opportunity to develop the mathematical maturity necessary for the study of algebra. Pre-Algebra links elementary arithmetic with the abstractions of algebra. Technology will be appropriately utilized to facilitate conversation, discussion and debate in the classroom.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

Prerequisite: Math 6

Algebra I Honors

1812

GRADE 7

2 Semesters

Providing in-depth instruction at an accelerated pace, the Algebra I Honors course is designed to foster critical thinking and real-world problem solving skills, which are needed as the foundation of true algebraic reasoning. Multiple representations will be emphasized as a key to effective mathematical modeling. Students will become skilled at solving practical problems through the use of symbols, graphs, tables, diagrams and technology. After solving problems through this varied course of study, students will check the reasonableness of any result; the “language” of algebra will be emphasized as a key to the meaningful interpretation of any conclusion. By the end of the course, students will be able to graph linear and quadratic functions, solve multi-step equations and inequalities, simplify and factor polynomials, and interpret the solutions to systems of equations. This is a Pennsylvania state Keystone assessed course.

The following middle school courses will receive a transfer credit onto the high school transcript:

Algebra I Essentials, Algebra I – Honors, Geometry – Honors, and all world language level I courses. However, these grades will not be calculated into the students’ QPA.

Prerequisite: Pre-Algebra or Advanced Pre-Algebra

Science

Science 7

0731

GRADE 7

2 Semesters

The seventh grade Science course takes students on a journey of the natural world, from the elements, which make up matter to the intricate web of the ecosystems which comprise our planet. Throughout the course students will apply the scientific method as they investigate introductory chemistry, cell theory, heredity, natural selection, classification, infectious diseases and ecology. Students will use their critical thinking skills to draw conclusions based on evidence. Fundamental to the course is uniting the topics of study to real world scenarios and events.

7th Grade Physical Education

Physical Education

GRADE 7

2 Semesters - Alternating Days

The seventh grade Physical Education Program is a continuation of Middle School physical education concepts. This course focuses evenly on fitness, games and sport activities, while integrating current technology to monitor the body's response to exercise. The course concentrates on teamwork and sportsmanship and the application of such beyond the physical education classroom.

7th Grade Performing Arts

Orchestra

0761

GRADE 7

2 Semesters

Seventh Grade Orchestra is a musical ensemble with public performance as the primary goal. Students will work on individual instrumental technique, as well as ensemble technique. Students will also learn about music composition, theory and history through study of the concert music selections. Opportunities exist to participate in various honors ensembles and groups throughout the year.

Students must currently participate in the sixth grade orchestra or pass an audition with the orchestra director to participate. The orchestra performs three concerts every school year. Attendance and participation at these concerts is mandatory. This ensemble rehearses every other day plus one (1) full ensemble rehearsal per week during tutorial.

Chorus

0764

GRADE 7

2 Semesters

Seventh grade students may elect to take part in the chorus. Vocalists will perform music of various cultures throughout history, while learning about vocal production, singing in unison, 2-part and 3-part harmony, and singing in languages other than English. Chorus students will have written and singing assessments throughout the course. These assessments will be used to help the students improve note reading, singing, and general musicality. Chorus students will meet on an every other day basis. Chorus members' participation is mandatory in three (3) concerts during the school year.

The Show Choir is introduced in seventh grade. Show Choir will meet one morning a week from 7:00-7:45 a.m. Participation is by audition only. Members must be participating in a school chorus class to be able to participate in Show Choir.

Band

0767

GRADE 7

2 Semesters

The Seventh Grade Band is a music course selection that has quality musical performance as a primary objective. This course is designed to improve a student's proficiency on a band instrument (woodwind, brass, percussion) with an emphasis on performance in a large group. Personal musicianship is developed through ear training, rhythm training, interpretation of dynamics, and listening. Core goals of ensemble work are to encourage creativity and self-expression, support instrumental development and provide an atmosphere that fosters positive self-esteem.

Attendance at all performances is required. This ensemble rehearses every other day plus one (1) full ensemble rehearsal per week during tutorial.

The jazz band is introduced in seventh grade. Jazz band will meet one morning a week from 7:00-7:45 a.m. Participation is by audition only. Small sectional rehearsals are also provided as needed. Membership is open to students with previous Middle School band experience or director recommendation.

Music Appreciation II

0769

GRADE 7

2 Semesters

Music Appreciation II is required for seventh graders who are not enrolled in a performance ensemble. This course is designed to give students an overall understanding of music, and provide ensemble experience in World Drumming. An appreciation and comprehension of music from all time periods is the primary objective. Music Appreciation II will meet every other day.

7th Grade Rotations

Computer Applications II

GRADE 7

7.5 Weeks

Computer Applications II is based on the App Creators curriculum, which is a Project Lead the Way course. In this course, students will be exposed to computer science by computationally analyzing and developing solutions to authentic problems through mobile app development. Additionally, students will convey the positive impact of the application of computer science to other disciplines and to society.

Students will customize their experience by choosing a problem that interests them from the areas of health, environment, emergency preparedness, education, community service, and school culture. Because problems in the real world involve more than one discipline, the unit will introduce students to biomedical science concepts as they work on solutions for the specific problems they choose to tackle.

Science, Technology, Engineering, Art, and Math (STEAM)

GRADE 7

7.5 Weeks

This STEAM course provides an integrated approach to the Middle School's introduction to engineering and technology. In this course, students will utilize various approaches to solving problems (including the engineering design process and experimentation) and apply their creativity in the invention and innovation of new products, processes, or systems. In doing so, students will learn how technologies impact their lives. They will also consider how criteria, constraints, and processes affect designs. Finally, they will implement the skills learned (brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs) in their problem solutions. Students will also develop skills in researching for information, communicating design information, and reporting results.

Global Challenges

GRADE 7

7.5 Weeks

In Global Challenges, students will use 21st century skills to understand and address global issues. As such, students will explore characteristics of their own culture and begin to view themselves and their world from a global perspective. Students will be asked to work collaboratively to propose research and design solutions that address identified relevant, authentic global issues. Student collaboration and presentation of global challenges and solutions will further expand their global awareness.

Health II

GRADE 7

7.5 Weeks

Health II includes the following units of study: Physical Fitness, Mental and Emotional Health, Teens, Alcohol and Drugs, and CPR. Students will be taught the basic fundamental techniques for adult and child CPR, AED, and the Heimlich maneuver in order to respond appropriately in case of an emergency. This course encourages students to consider their own health and safety, as well as the health and safety of others.

Visual Arts II

GRADE 7

7.5 Weeks

In Visual Arts II, students will connect their own works of art to art from the world around them. The students will learn about art as a way to understand and exchange ideas. Studio work may include drawing, printmaking, metal tooling and found objects. Students will be asked to reflect upon their own work and the work of their classmates.

8th Grade Academic Courses

English

Honors English 8

0850

GRADE 8

2 Semesters

Eighth grade Honors English is a literature and writing course designed for those students who like to read, who read above grade level, and who are ready and able to move from concrete to more abstract thinking and analysis. Much of the course work revolves around the study of both short and full-length fiction and non-fiction works as students learn to analyze literature, as well as make their thinking visible through lively discussion and carefully developed writing across all levels of discourse. Grammar and vocabulary instruction are also included as a means to support and strengthen student reading, writing, and speaking skills. Although the goals of the class are similar to those in Academic English 8, the pacing and depth of analysis are more rigorous.

Criteria for Recommendation: 1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.

GRADE 8

2 Semesters

Eighth grade Academic English is a literature and writing course, which focuses on the development of critical thinking skills through the study of full-length fiction and non-fiction works, poetry, and short stories. Students will grow in their ability to read and understand literature, as well as work toward achieving proficiency in various modes of writing. Grammar and vocabulary instruction are also included as a means to support and strengthen student reading, writing, and speaking skills.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

Reading

Reading 8

0821

GRADE 8

2 Semesters

Reading 8 is a literature course that seeks to enhance reading comprehension and literary analysis skills. Students work on developing and improving these skills through interacting with fiction and non-fiction texts, classroom novels and other reading selections. In this course, there is a strong emphasis on vocabulary skills including multiple-meaning words and words in context. The writing component of this course occurs in English 8, therefore reading instruction occurs at an individualized level and a developmentally appropriate pace. The curriculum of this class compliments and supports the eighth grade English course.

- Criteria for Recommendation:
- 1 A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

History

Honors American History 8

0840

GRADE 8

2 Semesters

Honors American History is a course designed for students with stronger reading, writing and critical thinking skills. The course is intended to better prepare those students who are planning to take honors level classes in high school. Students in the Honors American History course will examine the forces and events from Pre-Columbian times through the Civil War that have shaped current day America by drawing upon historical, economic, social and political events. Although the breadth of content is similar to Academic American History, the content depth, process and product are different. There is a greater emphasis on analyzing primary source material and the utilization of critical thinking skills. Instructional technology will be infused throughout this course, including tools such as back channeling chats, Wikispaces, educational alternate reality games, online animations, Discovery Education™ assessments and streaming video to further engage students in the learning process.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. A commitment to reading and writing

GRADE 8

2 Semesters

American History is designed to enhance the student's awareness of the many forces that have shaped the patterns of American history from Pre-Columbian times through the Civil War. The course draws upon the disciplines of geography, economics, sociology and political science to emphasize the themes of history and the underlying concepts that unify historical events. It is organized on a chronological basis to help give the students a sense of time and continuity. Content reading, writing and map skills are an integral part of the curriculum. Instructional technology will be infused throughout this course, including tools such as back channeling chats, Wikispaces, educational alternate reality games, online animations, Discovery Education™ assessments and streaming video to further engage students in the learning process.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

Math

The Middle School math teachers understand the unique development of our students. In a subsequent year, it is possible for a student who demonstrates mathematical proficiency and motivation to move into a more advanced math course. When considering and planning for future course selections, please consult the high school math pathways chart available as a reference in the Appendix on Page 44.

Algebra I – Honors

0812

GRADE 8

2 Semesters

Providing in-depth instruction at an accelerated pace, the Algebra I Honors course is designed to foster in students the critical thinking and real-world problem solving skills needed as the foundation of true algebraic reasoning. Multiple representations will be emphasized as a key to effective mathematical modeling – students will become skilled at solving practical problems through the use of symbols, graphs, tables, diagrams and technology. After solving problems through this varied course of study, students will check the reasonableness of any result; the “language” of algebra will be emphasized as a key to the meaningful interpretation of any conclusion. By the end of the course, students will be able to graph linear and quadratic functions, solve multi-step equations and inequalities, simplify and factor polynomials, and interpret the solutions to systems of equations. This is a Pennsylvania state Keystone assessed course.

Criteria for Recommendation: 1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.

Prerequisite: Pre-Algebra or Advanced Pre-Algebra

The following middle school courses will receive a transfer credit onto the high school transcript:

Algebra I Essentials, Algebra I – Honors, Geometry – Honors, and all world language level I courses. However, these grades will not be calculated into the students’ QPA.

GRADE 8

2 Semesters

Students who take the Algebra I Essentials Course will be provided with review, practice, application and extensions of the mathematical skills necessary for success in Algebra I. Multiple methods of assessment will be utilized to determine retention skills and those lost that require re-teaching and practice. The content of the course will focus on: proportional reasoning, geometry, linear equations, the number system and statistical analysis. Students will move quickly from the basic skills to the application and extension to ensure better retention for a full year of Algebra I in ninth grade.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

Prerequisite: Pre-Algebra or Advanced Pre-Algebra

The following middle school courses will receive a transfer credit onto the high school transcript:

Algebra I Essentials, Algebra I – Honors, Geometry – Honors, and all world language level I courses. However, these grades will not be calculated into the students' QPA.

Geometry Honors

0818

GRADE 8

2 Semesters

Geometry will help the student to perceive the role of inductive and deductive reasoning in both mathematical and non-mathematical situations. Furthermore, the student will learn to appreciate the need for clarity and precision of language. The course includes discussion on the subject of deductive proofs, angles and perpendicular lines, parallel lines, congruent triangles, circles, areas and volumes of solid and plane figures and an introduction into coordinate geometry. A TI-83+ or TI-84+ graphing calculator is strongly recommended.

Prerequisite: Algebra I – Honors

The following middle school courses will receive a transfer credit onto the high school transcript:

Algebra I Essentials, Algebra I – Honors, Geometry – Honors, and all world language level I courses. However, these grades will not be calculated into the students' QPA.

Science

Honors Science 8

0830

GRADE 8

2 Semesters

The eighth grade Honors Science course is designed for students with strong skills in problem solving, mathematical computation, and technological application. There are three main components that differentiate the Honors course from the Academic course. They include independent reading and writing, advanced inquiry extension labs, and in-depth application of mathematical processes and computation skills, particularly scientific notation.

As is the case with the regular eighth grade science class, this course will incorporate Physical Science (heat, magnetism, electricity, sound, light and a heavy emphasis in chemistry), Astronomy (astronomical tools, the planets, and the stars) and Ecology (human impact on the environment, renewable and nonrenewable resources, biodiversity, and ecological careers). Although the breadth of content is similar to the regular eighth grade science course, the content depth, process, and product will be different. There will be a constant emphasis on higher-level critical thinking skills and independent thinking skills applied to a variety of tasks, including writing lab hypotheses, independent readings, planning and performing experiments, charting and graphing results, analyzing experimental data using mathematical applications, and drawing conclusions. Students will then apply these concepts and skills to solve real-world problems.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. Consistent above-average grades in Mathematics

Science 8

0832

GRADE 8

2 Semesters

The eighth grade Science course incorporates three strands of science. They include: Physical Science (heat, magnetism, electricity, sound, light and a heavy emphasis in chemistry), Astronomy (astronomical tools, the planets, and the stars), and Ecology (human impact on the environment, renewable and nonrenewable resources, biodiversity, and ecological careers). The course emphasizes the steps of the scientific method by using a myriad of hands-on labs, national science standard software and problem-solving activities that involve analyzing discrepant events. All units incorporate individual and cooperative learning activities.

- Criteria for Recommendation:
1. A rubric based on assessment scores, grades in current courses, teacher recommendations with regard to work ethic, and scores on quizzes and tests will be utilized to appropriately place students in honors and advanced courses.
 2. If parents wish to have their child enrolled in a more rigorous course, the student must obtain the appropriate form from the guidance office for review and approval by the principal.
 3. If parents believe their son or daughter can be successful in the more rigorous level of a course, parents may petition the principal to schedule against the recommendation formulated by the rubric.

8th Grade Physical Education

Physical Education

GRADE 8

Alternating Days

The eighth grade Physical Education program is a conclusion of the Middle School concepts. This course focuses primarily on lifetime fitness and health concepts, with minimal emphasis on team sports and games. This course includes a variety of personal fitness activities including bicycle education, cross country running/hiking, team building, racquet sports and other games and activities.

8th Grade Performing Arts

Orchestra

0861

GRADE 8

2 Semesters

Eighth Grade Orchestra is a musical ensemble with public performance as the primary goal. Students will work on individual instrumental technique, as well as ensemble technique. Students will also learn about music composition, theory and history through study of the concert music selections. Opportunities exist to participate in various honors ensembles and groups throughout the year.

Students must currently participate in the seventh grade orchestra or pass an audition with the orchestra director to participate. The orchestra performs three concerts every school year. Attendance and participation at these concerts is mandatory. This ensemble rehearses five (5) days per week.

Chorus

0863

GRADE 8

2 Semesters

Eighth grade students may elect to take part in the chorus. Vocalists will perform music of various cultures throughout history, often singing in languages other than English, while learning about vocal production, singing in 3-part and 4-part harmony and communicating as part of a vocal ensemble. Chorus students will have written and singing assessments throughout the course. These assessments will be used to help the students improve note reading, singing, and general musicality. Chorus students will meet five (5) days a week. Chorus members' participation is mandatory in three (3) concerts during the school year. Opportunities for participation in additional vocal ensembles will be made available to qualifying students.

The Show Choir is continued in eighth grade. Show Choir will meet one morning a week from 7:00-7:45 a.m. Participation is by audition only. Members must be participating in a school chorus class to be able to participate in Show Choir.

Band

0867

GRADE 8

2 Semesters

The Eighth Grade Band is a music course selection that has quality musical performance as a primary objective. While the development of the individual's music performance will continue to be emphasized, greater emphasis will be placed on the quality of the ensemble. Personal musicianship is developed through ear training, rhythm training, interpretation of dynamics, and listening. Core goals of ensemble work will include balance, agreement in articulation, ensemble expression and group intonation.

Attendance at all performances is required. This ensemble rehearses five (5) days per week.

The Jazz Band is further developed in eighth grade. Participation is by audition only. Small sectional rehearsals are also provided as needed. *Various honors band opportunities are expanded during the eighth grade year.* Membership is open to students with previous Middle School band experience or director recommendation.

8th Grade Rotations

Computer Applications III

GRADE 8

7.5 Weeks

Similar to Computer Applications I and II, this is a project-oriented course where students will utilize a multitude of programming skills, which they will be able to apply to authentic problems. The emphasis of this course will be for students to expand and refine computational thinking skills and develop a solid foundation in computer coding. Throughout this course, students will also continue to develop proper keyboarding skills while expanding their MS Office skills. Additionally, students will design and publish a menu for the Breakfast Café, as well as explore other topics, which include social media and digital footprints, digital citizenship, research, document design, multimedia design and presentations.

Health III

GRADE 8

7.5 Weeks

The Health III rotation will include the following units of study: The Body Systems, The Stages of Life, Adolescent Growth and Development, and Substance Abuse and Awareness. The major goal of this course is for students to be armed with information to make educated decisions about their health and well-being.

Introduction to Engineering and Design

GRADE 8

7.5 Weeks

This course serves to motivate and inspire students to utilize and apply the skills learned in the previous two years. Students will work both individually and in teams to use technology to research authentic problems and create original solutions. Students will also be exposed to relevant career fields and will learn pertinent skills relevant to pursuing the similar program at the High School with exposure to real-world job tasks. This course promotes students' independence.

Visual Arts III

GRADE 8

7.5 Weeks

In Visual Arts III, the students will build on the skills and concepts explored in grades 6 and 7. The students will look to the work of other artists as well as visual culture. Students will create artwork that is influenced by other artists' compelling ideas and explore how artists sell those ideas. They will collaborate with classmates to invent unique, artistic solutions to problems. Studio work may involve drawing, painting with acrylics, clay and more.

Career Awareness

GRADE 8

7.5 Weeks

The Career Awareness course is a rotation class for eighth grade students. Students will explore web-based interest inventories to investigate possible careers. Objectives include preparation, career acquisition, career retention and career advancement. Students will participate in activities to help them realize their maximum potential and acquire skills. Each student will begin a portfolio, which will accompany him/her to high school for further additions.

8th Grade World Language

The following middle school courses will receive a transfer credit onto the high school transcript:

Algebra I Essentials, Algebra I – Honors, Geometry – Honors, and all world language level I courses. However, these grades will not be calculated into the students' QPA.

Spanish I

0882

GRADE 8

2 Semesters

In Spanish I students begin a five-year sequence toward proficiency in Spanish. Level I Spanish students will be introduced to the language and culture of Spain and other Spanish speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. Students are assessed through written, oral and aural exercise, tests and quizzes, daily class participation and projects. Assessments are based on the four basic communication skills of speaking, listening, reading and writing, with the strongest emphasis being placed on speaking. An oral proficiency exam will be given at the mid-term and at the end of the year.

French I

0883

GRADE 8

2 Semesters

In French I students begin a five-year sequence toward proficiency in French. Level I French students will be introduced to the language and culture of France and other French speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. Students are assessed through written, oral and aural exercise, tests and quizzes, daily class participation and projects. Assessments are based on the four basic communication skills of speaking, listening, reading and writing, with the strongest emphasis being placed on speaking. An oral proficiency exam will be given at the mid-term and at the end of the year.

German I

0885

GRADE 8

2 Semesters

In German I students begin a five-year sequence toward proficiency in German. Level I German students will be introduced to the language and culture of Germany and other German speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. Students are assessed through written, oral and aural exercise, tests and quizzes, daily class participation and projects. Assessments are based on the four basic communication skills of speaking, listening, reading and writing, with the strongest emphasis being placed on speaking. An oral proficiency exam will be given at the mid-term and at the end of the year.

Mandarin I

0881

GRADE 8

2 Semesters

In Mandarin I students begin a five-year sequence toward proficiency in Mandarin. Level I Mandarin students will be introduced to the language and culture of China and other Mandarin speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. In addition, students will investigate the meaning of the Mandarin characters and practice calligraphy when creating representations of the characters. Students are assessed through written, oral and aural exercise, tests and quizzes, daily class participation and projects. Assessments are based on the four basic communication skills of speaking, listening, reading and writing, with the strongest emphasis being placed on speaking. An oral proficiency exam will be given at the end of the year.

8th Grade Semester Classes

Computer Animation and Gaming

0910

GRADE 8

1 Semester

In this Computer Animation and Gaming course, students will have the opportunity to develop skills in computer animation and game design. Students will create projects using Scratch and Alice software. Scratch and Alice are software packages for creating animation in small virtual worlds. Scratch uses 2D objects; Alice uses 3D models in Pixar and Disney animation style. This is a project-oriented class where learning takes place through hands-on activities. Students will engage in an interactive interface enabling them to drag and drop graphic tiles to create a program. Scratch and Alice allow students to immediately see how their animation programs run, enabling them to easily understand the relationship between programming statements and the behavior of objects in their virtual world. Assessment will be based on rubrics for each of the learning tasks.

Architecture, Engineering and Construction # 0930

GRADE 8

1 Semester

This Architectural Engineering and Construction class combines the theory and application of civil engineering. Students will explore and understand principles of construction technology, including the science of forces on structures and building materials. They will interpret, draw, and design both two-dimensional and three-dimensional architectural components. In addition, students will engineer and test various structures. There will be an emphasis on the impact of construction on the environment and society, including the application of green technologies. The course will culminate with the real-world application of this curriculum in the construction of various needs of the district or the community. Assessment will be based on rubrics focusing on both the engineering and construction skills, as well as the final project.

Introduction to Robotics

0940

GRADE 8

1 Semester

While participating in this course, students will become familiar with and utilize various robots, software applications, tools, machines, and digital media devices. They will have an opportunity to complete multiple investigations involving inquiry and guided research, both individually and in teams. The students will complete a culminating project and present it in a multimedia format to peers, thus reinforcing 21st century skills and concepts.

Advanced Physical Education

0970

GRADE 8

1 Semester

This Advanced Physical Education course provides the opportunity to improve and enhance the physical education learning experience. Emphasis will be on cardio respiratory efficiency, muscular strength and muscular endurance. It is designed to help students enhance flexibility, help students understand body composition, and help students develop positive attitudes and responsible habits. Fitness activities may include, but are not limited to: biking, aerobics, P90X, yoga, weight training, racquet sports, cooperative challenges/activities, Zumba, Pilates and cooperative games.

This physical fitness class is for those students who want to make a commitment to their physical well-being. The main portion of this course will be gender-specific; however, some components will be co-taught in a co-ed setting.

Ceramics and Sculpture

0950

GRADE 8

1 Semester

Ceramics and Sculpture is a one semester fine arts elective designed for eighth grade students. In this course, you will learn a variety of hand-building skills and techniques with clay and other 3 dimensional art media. In addition, you will build upon your knowledge of culture and history as you explore personal creative expression.

Draw, Paint, Print

0960

GRADE 8

1 Semester

Draw, Paint, Print is a semester course for students who truly want to express themselves through art! This exploratory class will take us to the art room, the print studio, the hallways and possibly even beyond school walls. Some of the projects include drawing portraits, painting landscapes, using your own photography to make screen prints and more. By experimenting with diverse media, students will broaden their creative and technical abilities.

APPENDIX

When considering and planning for math course selections, please consult the following resource to assist in planning for the different math courses available at the high school.

High School Math Course Pathway Reference

Traditional Math Pathways		Requirement: 4 Courses			
Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12*
Algebra I-Honors	Geometry-Honors	Algebra II-Honors	Pre-Calculus-Honors	AP Calculus AB	AP Calculus BC or CHS Linear Algebra
Pre-Algebra	Algebra I -Honors	Geometry-Honors	Algebra II-Honors	Pre-Calculus-Honors or Pre-Calculus	AP Calculus AB or CHS Calculus (Business)
Pre-Algebra	Algebra I-Honors	Geometry	Algebra II	Pre-Calculus or Intro. To Pre-Calculus	CHS Basic Applied Statistics- or Applied Math
Pre-Algebra	Algebra I Essentials	Algebra I	Geometry	Algebra II	Intro. To Pre-Calculus or Applied Mathematics
Elective possibilities—Please note that students can double-up on math courses so long as they meet the prerequisites		CHS Basic Applied Statistics AP Statistics Problem Solving			
		CHS Discrete Mathematics SAT Prep: Math			
*Prior to scheduling a math course in grade 12, students should review their post-secondary goals in order to better prepare themselves for math requirements for college majors and careers.					
*CHS denotes College in High School Course					