

**West Mifflin Area
Middle School**



Course of Studies '21-'22

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WEST MIFFLIN MIDDLE SCHOOL COURSE DESCRIPTIONS

The West Mifflin Area Middle School represents an environment, which allows each child to experience not only emotional growth but also strong academic success through a supportive teaching staff and a responsive administration.

8th Grade

LANGUAGE ARTS

TITLE: English Language Arts 8
Course Number: 0148
Prerequisite: N/A

Credit: 1
Grade: 8

Description: This course is designed to provide instruction in reading comprehension, writing and methods of inquiry as found in the core of grammar and mechanics. This course will focus on the processes, skills, and strategies for effective communication in all its forms, with an emphasis on various literary texts. The course prepares students for both Ninth Grade Academic and Honors English.

TITLE: Advanced ELA 8
Course Number: 0149
Prerequisite: Advanced 7th grade ELA PSSA score, teacher recommendation, and A or B in ELA 7 for final grade

Credit: 1
Grade: 8

Description: A more challenging course than Eighth Grade Academic English/Language Arts, this class focuses on reading, writing, listening, speaking and viewing competencies which are integrated throughout students' learning experiences. This course will serve as preparation for Ninth Grade Honors English.

8th Grade

READING

Title: Reading 8
Course Number: 8016
Prerequisite: N/A

Credit: 1
Grade: 8

This course will continue students' growth in the areas of reading, writing, listening, speaking, discussion, and reflection. Reading strategies, critical thinking skills, vocabulary building, and the iReady program comprise the main elements of Reading instruction. The goal of the course is to engage students in the study of literature to promote critical thinking and an appreciation of literature. Guided by the PA Common Core English Language Arts Standards for Eighth Grade, students will develop, practice, and refine reading strategies and comprehension skills. Students will be exposed to and interact with a variety of reading materials including historical fiction, autobiography, journal and news media, biography, informational and literary texts, and poetry.

MATH

TITLE: Math 8
Course Number: 0359
Prerequisite: N/A

Credit: 1
Grade: 8

Description: This is the third course in the sequence of secondary courses. This course contains PA Common Core assessment categories: Numbers and Operations, Algebraic Concepts, Geometry, and Measurement, Data and Probability.

TITLE: Pre-Algebra 8
Course Number:
Prerequisite: N/A

Credit: 1
Grade: 8

Description: The purpose of this course is two-fold. It is designed to prepare students for Algebra 1 in the High School and for success on the PSSA Grade 8 mathematics exam. Foundations of algebra will be explored through inquiry-based learning and mathematical discourse. The course will be aligned with the PA Core Standards and will also address some concepts that are assessed on the Keystone Algebra 1 Exam. The course will introduce basic Algebra concepts and will focus on conceptual understanding. In addition, real-world problems are explored and a solid foundation with numbers and operations is established.

TITLE: Algebra I
Course Number: 0368
Prerequisite: N/A

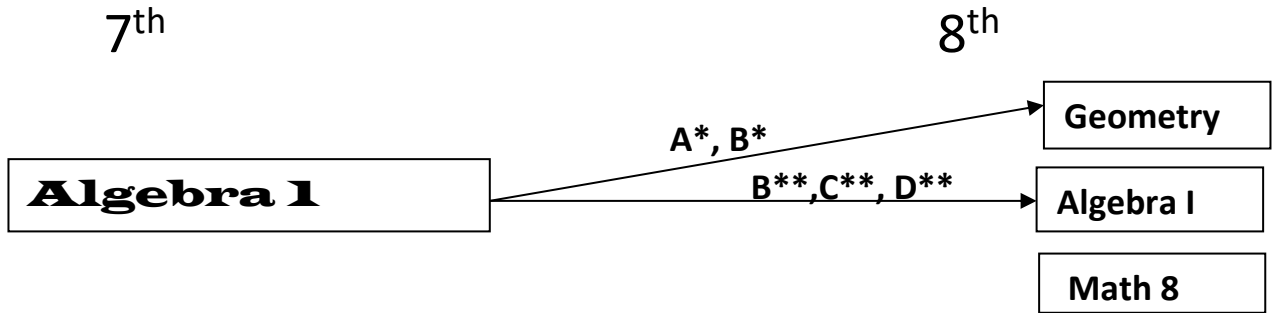
Credit: 1
Grade: 8

Description: The purpose of this course is to address both the Common Core Mathematics Standards and prepare students for the Keystone Algebra 1 Exam. This course fits into an overall program of mathematics studies and builds from what students have learned in previous mathematics courses as well as introducing more advanced topics. These advanced topics include understanding our number system, solving, graphing, and writing linear equations and inequalities, linear systems, exponents, quadratics, polynomials, factoring, simplifying square roots and data analysis. Students will take the PA Keystone Exam at the conclusion of this course. The Keystone Exam is a high school graduation requirement.

TITLE: Geometry
Course Number: 0379
Prerequisite: 85% in Algebra 7, scored Advanced/Proficient on the PSSA exam, passed the Keystone Algebra 1 exam, and teacher recommendation

Credit: 1
Grade: 8

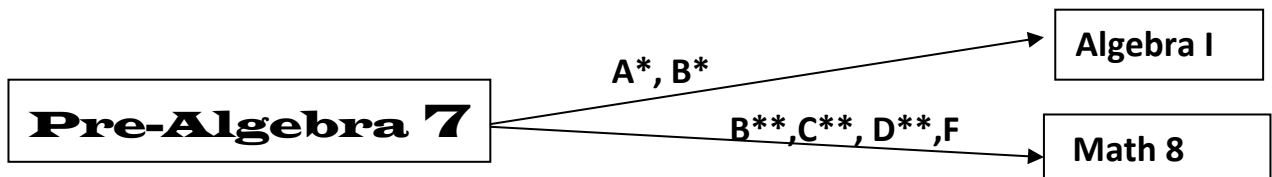
Description: Theorems involving triangles, parallel lines and polygons, congruence, similarities, circles and ratios are discussed.



***=Advanced PSSA Score, Advanced/Proficient Keystone Exam Score, and 90% or higher test scores. Meeting all requirements with the exception of passing the Keystone exam will result in supplemental instruction such as tutoring and/or an additional math class in order to continue to Geometry as long as the Keystone score is in the upper Basic range.**

****=Basic/Below Basic Keystone/PSSA Score**

Teacher Recommendation is required for all options.



***=Advanced/Proficient PSSA Score (must be above the median Proficient score) and teacher recommendation with 90% or higher test scores.**

****=Basic/Below Basic PSSA Score**



These are the course pathways. Exceptions to the prerequisite can be made with the agreement of the administrator, math department, counselor, student, and parent. The Algebra aptitude test will be administered in May.

SCIENCE

TITLE: Science 8
Course Number: 0128
Prerequisite: N/A

Credit: 1
Grade: 8

Description: This 8th grade science class follows an integrated approach in order to meet Pennsylvania State Science Standards. Units covered in 8th grade include: Engineering, Environmental Science, and Astronomy. A Science Fair Project is not a requirement for this class, but interested students may volunteer to complete a project. Students maintaining an A or B average in this 8th grade science class may qualify for advanced level science at the High School (dependent also upon 8th grade Algebra/Geometry grades).

TITLE: Accelerated Science 8
Course Number: 0129
Prerequisite: Teacher recommendation and Science 7 final grade of A

Credit: 1
Grade: 8

Description: This 8th grade science class follows the same curriculum as the 8th Grade Science Class, but at an accelerated pace. We also complete a mandatory Science Fair Project in this class with an opportunity to attend the Pittsburgh Regional Science Fair. Taking this class will not affect courses offered to the students at the High School level and is NOT required to take advanced level sciences at the High School. Students maintaining an A or B average in this 8th grade science class may qualify for advanced level science at the High School (dependent also upon 8th grade Algebra/Geometry grades).

TITLE: Accelerated Science 8
Course Number:

Credit: 1
Grade: 8

Prerequisite: C or better in Science (or Recommendation from science teacher), Consistently meets School/Classroom expectations

The main goal of this program is to provide students with the opportunity to learn how the world works around them relating to various science topics. Students will be given the opportunity to democratically decide what they learn week to week based on their interests (Sports Science, Video Games, Emotions, Technology, Ect). Students will be evaluated on reflections of work completed in and outside of class. Activities will range from demonstrations, videos, labs, field trips, and discussions. Through many activities students will demonstrate how theory is applicable in real world situations. All students will develop good methods of problem solving, reflection, and utilizing technology for science application.

SOCIAL STUDIES

TITLE: American History 8
Course Number: 0208
Prerequisite: N/A

Credit: 1
Grade: 8

Description: Through the use of technology, a variety of in-class activities, hands-on learning opportunities, students will experience American History from Colonial America through the Civil War. There will be a particular focus on the events that took place in, as well as the contributions made by, Western Pennsylvania, and, in some cases, the Mon Valley itself. Learning and assessment will be geared towards the students' individual abilities so that each student will be appropriately challenged and enabled to succeed.

FOREIGN LANGUAGE

TITLE: Spanish 1
Course Number: 0435
Prerequisite: Advanced or proficient on their ELA PSSA and A or B in English/Language Arts

Credit: 1
Grade: 8

Description: In Spanish I, students will develop the basics in Spanish language. Four language skills will be emphasized: listening, speaking, reading and writing. Spanish I is designed to equip students with the necessary skills of "how to learn" a foreign language as well as introduce them to the Spanish language itself. This course is communicative in nature; students learn to use the language, not just the grammar in everyday situations. Through readings, audio/visual presentations, and group work, students learn to use Spanish to meet basic survival skills and needs. In the process, students will learn about themselves, their language, and various Spanish-speaking cultures throughout the world.

MUSIC ELECTIVES

TITLE: Band 8
Course Number: 4000
Prerequisite: Incoming Requirements

Credit: 1
Grade: 8

Description: This class is open to any qualified* 8th grade student and meets daily for one (forty-seven minute) period and is taught by a music teacher with background in instrumental music. 8th Grade Band is designed to teach upper middle school band students a variety of music compositions and arrangements meant for preparing instrumentalists for high school band (and marching band). Students are graded on daily participation as well as varied performance opportunities such as evening concerts,

one high school football game, and assemblies, community/school events, or adjudications as deemed appropriate by the director. Students are expected to play at a certain level to enter this course (new students should see "Incoming Requirements" or contact the band director before scheduling).

TITLE: Chorus 8 Credit: 1
Course Number: 4020 Grade: 8
Prerequisite: Prior experience in a vocal ensemble and/or recommendation of the director

Description: Eighth grade chorus takes the singing voice with some experience, as well as the novice voice, and develops choral methods appropriate to a junior high school level. This is an elective course which will meet and rehearse on a regular basis as part of the student's daily schedule. The chorus will perform a mandatory holiday concert in December and a mandatory spring concert in May. Once the student enrolls in the class, he or she may drop the course only during the first 4 weeks of the school year. Opportunities for participation in outside festivals will be offered.

TITLE: Orchestra 8 Credit: 1
Course Number: 4010 Grade: 8
Prerequisite: determined by the instructor

Description: The middle school string orchestra class meets daily, and performs at least two public concerts per year. The ensembles perform orchestral music of varying styles & historic time periods: from the earl baroque through modern day. In order to enroll, students must be able to play an orchestral string instrument up to their grade level.

SPECIALS

TITLE: Personalized Learning 8 Credit: 1
Course Number: 9705 Grade: 8
Prerequisite: N/A

Description: Personalized learning is an educational approach that aims to customize learning for each student's strengths, needs, skills and interests.

TITLE: Applied Engineering Technologies Credit: 6 weeks
Course Number: 0428 Grade: 8
Prerequisite: N/A

Description: Students will dive deeper into Computer Aided Drafting and design in this course. Multi View Drawings will be emphasized leading to 3 dimensional computer generated drawing/designs utilizing SolidWorks CAD software. Students will design and print a keychain using the 3D printer. Manufacturing will be explored within the woodshop. Students will manufacture a letter organizer and white board memo minder. While in the lab students will be using a variety of hand tools, wood working machines, laser engraver, and CNC router. Safety will be strongly emphasized.

TITLE: Art 8
Course Number: 0422
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: The major goal for an 8th grade Art student is to understand and use the elements of art and principles of design, as well as, problem solving and critical thinking to your artwork.

Not dependent on factors such as class duration and frequency, the 8th grade 2d art curriculum will focus on drawing 3D Form, realistic vs. imaginary subject matter, abstraction in art, portrait drawing, symbolism, and personal expression. Self- assessments using rubrics, class critiques and project reflections will also occur.

TITLE: Computer Science 2
Course Number: 0419
Prerequisite: N/A

Credit: 12weeks
Grade: 8

Description: The Beginning Ideas in Computer Science curriculum exposes students to the power of computer science and how it can be used to impact their lives. Students are given the opportunity to **iterate** and **design** creative solutions to problems instead of just working with paper and pencil. Students learn how to **engage** one another as they work collaboratively to **apply** their ideas with computation. The Beginning Ideas in Computer Science curriculum allows students to **synthesize** their natural curiosity and interests with the tools of computer science. Students will learn to use Sandbloqs as a programming tool, while focusing on creating computational artifacts.

TITLE: Exploratory Language
Course Number: 0416
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: West Mifflin School District bases its world language program on the **National Standards for Foreign Language Learning** using a standards-based curriculum incorporating communication, culture, connections, comparisons and communities. In Spanish Grades 7 & 8, students will continue to acquire proficiency in listening, speaking, reading and writing the Spanish language. Students will

expand their vocabulary and skill usage by acquiring the fundamentals used in learning a second language.

TITLE: Family & Consumer Science 8
Course Number: 0413
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: Students in 8th grade will study reading of food nutritional labels and understand its components. They will study meal planning and shopping for food. Students will learn recipe and food preparation terms, review safety, sanitation and food borne illnesses. They will apply knowledge and procedures during cooking labs.

TITLE: Health 8
Course Number: 0434
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: Students will develop an overall understanding of the Health Triangle and how each side relates to each other. Key Components: Stress Techniques, Mental Health, Drugs/ Club Drugs, STD's/Abstinence.

TITLE: General Music 8
Course Number: 0425
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: 8th grade music seeks to continue to expand upon the students' horizons as far as musical taste and exposure gained in 7th grade music. Students will be provided hands-on experience with the technology in order to gain a first-hand understanding of the cutting-edge innovations that exist in the Music Technology realm. They will review musical notation and continue to build upon piano skills learned in 7th grade. They will be able to demonstrate how electronic music can be produced or recorded. They will research and develop ideas for musical creations, as well as design and compose their own musical pieces. Such music creation will continue to be explored for the variety of purposes in which it can be heard today: live performance, recorded performance, as a soundtrack to videos footage, along with other inventive avenues.

TITLE: Physical Education
Course Number: 1431
Prerequisite: N/A

Credit: 12 weeks
Grade: 8

Description: The Physical Education program provides each student with the opportunity to participate in a comprehensive and complete program consisting of skill development, lead up games, team sports, and physical fitness activities. The students receive instructions in rules, skills, and strategies associated with different sports as well as learning experiences involving physical conditioning activities. The

students will also have opportunities to become involved in lifelong physical activities through individual sport units. The program promotes a spirit of cooperation, leadership, fair play and friendly competition.

TITLE: STEM Research & Engineering
Course Number: 0439
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: Students will explore civil engineering principles and create a truss bridge design. Photoshop computer software shall bring their bridge designs to life through STEM research and sketching phases. The structure will undergo live load testing and analysis of strength related variables. Data derived will be calculated and compared with other student's outcomes. Students will utilize computer software to generate a COLORFUL three-foot inspirational poster project that highlights personal loves as well as incorporate Photoshop skills and commands. Another lesson consists on a custom T-shirt logo design that reinforces digital computer graphics and ultimately results in a color printed "take-home" shirt. Lastly, a tangible basketball hoop project will be developed by students using the computer while incorporating previously learned skills.

TITLE: Careers Study Group
Course Number: 1449
Prerequisite: N/A

Credit: 6 weeks
Grade: 8

Description: The Career Study Group is designed to introduce the career development process to students. The process includes self-awareness, career awareness, career exploration, and career preparation.

STEM ELECTIVES

TITLE: Forensic Science
Course Number: 0437

Credit: 6 weeks
Grade: 8

Prerequisite: **A or B in 7th grade science. Students whose final grade is a C in Science 7 will be accepted only with teacher recommendation.**

****Because of the limited space and demand for this course, you may be required to complete an assignment before the end of your 7th grade school year in order to help determine your placement in this course.***

Description: This course is designed as a fun and exciting way to learn science and technology concepts in forensic science. Forensic science is the application of science when investigating criminal activity by police agencies in a criminal justice system. This scientific subject incorporates all facets of science, such

as Biology, Chemistry, Physics, Entomology, Earth Science, Anatomy and Physiology. Major topics included in our course will be the history of forensics, observation skills, processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, hair, fibers, DNA, fingerprints, and document/handwriting analysis. **Note: Students in this course will be required to view photos of crime scenes and will analyze photos of bodies in various stages of decomposition.**

TITLE: Future City
Course Number: 0436
Prerequisite: N/A

Credit: 18 weeks
Grade: 8

***Because of the limited space and demand for this course, you may be required to complete an assignment before the end of your 7th grade school year in order to help determine your placement in this course.**

Description: This flexible, cross-curricular educational program give the students an opportunity to do the things that engineers do-identify problems; brainstorm ideas; design solutions; test, retest and build; and share their results – all while designing a city from the ground up. With this at its center, Future City is an engaging way to build students’ 21st century skills. The culmination of the class will be the Future City Engineering competition held at the Carnegie Music Hall in Oakland in January. Students participating in Future City will: work with an engineer mentor from Bechtel Marine Propulsion Corporation once a week, apply math and science concepts to real-world issues, develop writing, public speaking, problem solving, and time management skills, Research and propose solutions to engineering challenges, Discover different types of engineering and explore careers options, learn how their communities work and become better citizens, Develop strong teamwork skills.

TITLE: Sea Perch
Course Number: 0438
Prerequisite: N/A

Credit: 9 weeks
Grade: 8

***Because of the limited space and demand for this course, you may be required to complete an assignment before the end of your 7th grade school year in order to help determine your placement in this course.**

Description: Sea Perch is an innovative underwater robotics program sponsored by the US Navy and Bechtel Marine Propulsion Corporation that equips teachers and students with the resources they need to build an underwater Remotely Operated Vehicle (ROV) in an in-school setting. Student teams will be provided with an engineering mentor from Bechtel twice a week to help students build the ROV from a kit comprised of low-cost, easily accessible parts, following a curriculum that teaches basic engineering and science concepts with a marine engineering theme. Their engineers will also help the teams to apply design modifications to the ROV to make it function better in the pool challenges. The SeaPerch Program provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM).

Building a Sea Perch ROV teaches basic skills in ship and submarine design and encourages students to explore naval architecture and marine and ocean engineering principles. It also teaches basic science and engineering concepts and tool safety and technical procedures. Students learn important engineering and design skills and are exposed to all the exciting careers that are possible in naval architecture and naval, ocean, and marine engineering.

****You will be required to attend several after school or evening visits to the high school pool for testing of the vehicle and competition dates.***

**7th Grade
LANGUAGE ARTS**

TITLE: English Language Arts 7
Course Number: 0147
Prerequisite: N/A

Credit: 1
Grade: 7

Description: English Language Arts (ELA) is the study and improvement of the arts of language. These arts include reading, writing, speaking, and listening, along with viewing and visual representation. ELA 7 and Advanced ELA 7 students will be challenged to read, think, analyze, synthesize, question, cite evidence, debate, and write while incorporating 21st technology. Grammar, usage, and mechanics will begin with a review and progress remedially throughout the year. To meet the rigorous demands of the Common Core Standards, ELA 7 or Advanced ELA 7 is a full year course for all 7th grade students.

TITLE: Advanced English Language Arts 7
Course Number:
Prerequisite:

Description: The purpose of this course is to prepare students to meet the expectations of their current and future continuing education during a one period daily class. It is designed to help develop literacy skills through reading, writing, speaking, and listening. A variety of fiction and non-fiction texts are used to develop critical thinking and analytical skills. Informative writing is given special attention to improve

communication skills. This course will especially develop the steps of the writing process, which include pre-writing activities: graphic organizers, rough drafts, evaluating, self and peer revision and editing, and publishing. Technology will support and extend segments of the curriculum.

7th Grade

READING

TITLE: Reading 7

Credit: 1

Course Number: 7100

Grade: 7

Prerequisite: N/A

Students in seventh grade reading engage in the study of literature with the goal of becoming lifelong critical readers and writers. Guided by the PA Common Core English Language Arts Standards for Seventh Grade, they interact with a wide variety of texts and genres. Both fiction and nonfiction stories, poems, and articles selected from various teacher selected text formats. In addition, students read, analyze and respond to several novels, as well as many selections of informational texts. Students are challenged and encouraged to read a selected novel of their choice and reflect using the reflective projects, in addition to the in-class selections.

MATH

TITLE: CC Math 7

Credit: 1

Course Number: 0317

Grade: 7

Prerequisite: N/A

Description: Course organized into individual mathematical modules and clusters aligned to build connections within each domain of the Common Core State Standards. Class is organized with a focus on essential grade 7 mathematical concepts.

TITLE: Pre-Algebra 7

Credit: 1

Course Number: 0318

Grade: 7

Prerequisite: N/A

Description: An accelerated Math program with a strong emphasis on problem-solving and higher order thinking exercises. Designed to teach 7th grade Common Core Standards and an introduction to algebraic thinking/problem-solving. This is an accelerated Math course.

TITLE: Algebra I

Credit: 1

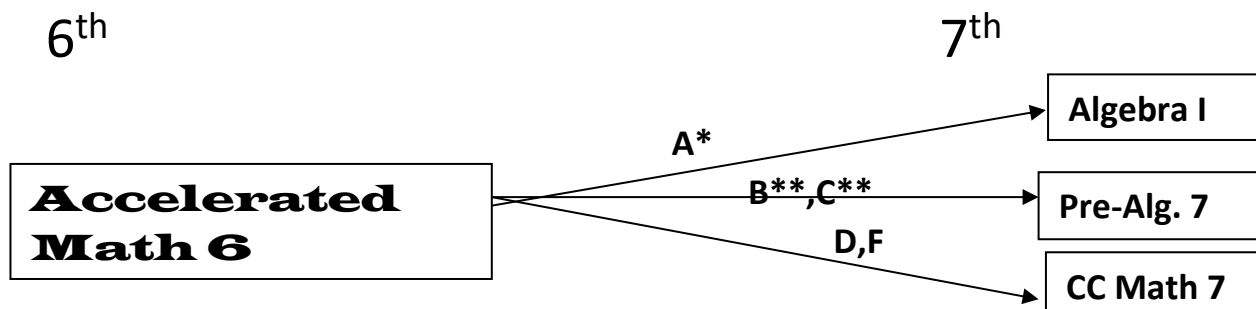
Course Number: 0319

Grade: 7

Prerequisite: N/A

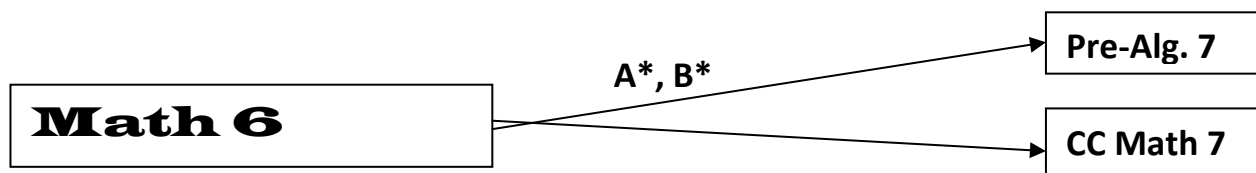
Description: The purpose of this course is to address both the Common Core Mathematics Standards and prepare students for the Keystone Algebra 1 Exam. This course fits into an overall program of mathematics studies and builds from what students have learned in previous mathematics courses as well as introducing more advanced topics. These advanced topics include understanding our number

system, solving, graphing, and writing linear equations and inequalities, linear systems, exponents, quadratics, polynomials, factoring, simplifying square roots and data analysis. Students will take the PA Keystone Exam at the conclusion of this course. The Keystone Exam is a high school graduation requirement. This is a high school level accelerated Math course.



***=Advanced PSSA score (above the median Advanced Score), Advanced score on the Algebra aptitude test, and teacher recommendation with 90% or higher class test scores.**

****=Advanced/Proficient PSSA score, 85% or higher on class test scores**



***=Advanced/Proficient (above the median Proficient) PSSA score and 85% or higher on class test scores**

These are the course pathways. Exceptions to the prerequisite can be made with the agreement of the administrator, math department, counselor, student, and parent. The Algebra aptitude test will be administered in May.

CC=Common Core

SCIENCE

TITLE: Science 7
 Course Number: 0127
 Prerequisite: N/A

Credit: 1
 Grade: 7

Description: The 7th grade science class follows an integrated approach in order to meet Pennsylvania State Science Standards. Units covered include: Introduction to Matter, and Cells, Heredity, and Classification. Students maintaining an A average in this 7th grade science class may qualify for 8th Grade Advanced Science with a recommendation from their 7th grade science teacher.

SOCIAL STUDIES

TITLE: Social Studies 7
Course Number: 0207
Prerequisite: N/A

Credit: 1
Grade: 7

Description:

In this class students will take an in-depth look at the pre-Columbian cultures of the Americas. The culture and civilizations of the Native Americans before the arrival of the Europeans will be discussed. We will also examine the early European settlers and the colonization of the Americas.

MUSIC ELECTIVES

TITLE: Band 7
Course Number: 3000
Prerequisite: Incoming Requirements

Credit: 1
Grade: 7

Description: This class is open to any qualified* 7th grade student and meets daily for one (forty-seven minute) period and is taught by a music teacher with background in instrumental music. 7th Grade Band is designed to teach middle school band students a variety of music compositions and arrangements meant for preparing instrumentalists to play the basic skills required of a 3rd year player. Students are graded on daily participation as well as evening concerts. Students are expected to play at a certain level to enter this course (new students should see "Incoming Requirements" or contact the band director before scheduling).

TITLE: Chorus 7
Course Number: 3020
Prerequisite: Prior experience in a vocal ensemble and/or recommendation of the director

Credit: 1
Grade: 7

Description: Seventh grade chorus takes the singing voice with some experience, as well as the novice voice, and develops choral methods appropriate to a junior high school level. This is an elective course which will meet and rehearse on a regular basis as part of the student's daily schedule. The chorus will perform a mandatory holiday concert in December and a mandatory spring concert in May. Once the student enrolls in the class, he or she may drop the course only during the first 4 weeks of the school year.

Opportunities for participation in outside festivals will be offered.

Criteria for selection: Prior experience in a vocal ensemble and/or recommendation of the director.

TITLE: Orchestra 7

Credit: 1

Course Number: 3010
Prerequisite: determined by the instructor

Grade: 7

Description: The middle school string orchestra class meets daily, and performs at least two public concerts per year. The ensembles perform orchestral music of varying styles & historic time periods: from the early baroque through modern day. In order to enroll, students must be able to play an orchestral string instrument up to their grade level, as determined by the instructor.

SPECIALS

TITLE: Personalized Learning 7
Course Number: 9704
Prerequisite: N/A

Credit: 1
Grade: 7

Description: Description: Personalized learning is an educational approach that aims to customize learning for each student's strengths, needs, skills and interests.

TITLE: Exploring STEM
Course Number: 0440
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: Students will be engaged in designing, building and testing structures along with building a Mag-Lev vehicle. While designing, building, and testing the Mag-Lev vehicle environmental impacts will be studied. Students will be exposed to the SolidWorks CAD drafting program where they will complete a number of two dimensional drawings. Corel Draw software will also be introduced to design and produce a laser engraved water bottle and a laser engraved ruler. The game of hockey will be used as an exploratory learning approach, exposing students to foundational STEM concepts, scientific thinking and data/graphical analysis through real-life STEM applications. Math, science, and writing will be a part of all learning activities, including journal writing, data collection, data calculations, and scientific terms.

TITLE: Art 7
Number: 0421
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: Painting emphasis including blending and shading techniques and a variety of paints. Emphasis on geometric vs. organic design explored through animal themes, multicultural and historical subjects. Symbolism and personal expression.

TITLE: Computer Concepts 1
Course Number: 0418
Prerequisite: N/A

Credit: 12 weeks
Grade: 7

Description: The Beginning Ideas in Computer Science curriculum exposes students to the power of computer science and how it can be used to impact their lives. Students are given the opportunity to **iterate** and **design** creative solutions to problems instead of just working with paper and pencil. Students learn how to **engage** one another as they work collaboratively to **apply** their ideas with computation. The Beginning Ideas in Computer Science curriculum allows students to **synthesize** their natural curiosity and interests with the tools of computer science. Students will learn to use Sandbloqs as a programming tool, while focusing on structures and functions of programming.

TITLE: Exploratory Language 7
Course Number: 0415
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: West Mifflin School District bases its world language program on the **National Standards for Foreign Language Learning** using a standards-based curriculum incorporating communication, culture, connections, comparisons and communities. In Spanish Grades 7 & 8, students will continue to acquire proficiency in listening, speaking, reading and writing the Spanish language. Students will expand their vocabulary and skill usage by acquiring the fundamentals used in learning a second language.

TITLE: Family & Consumer Science 7
Course Number: 0412
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description Students in 7th grade will review My Plate and healthy eating habits. They will create a personal wellness plan. Students will learn kitchen safety and sanitation, recipe reading, measuring and equivalents and unit pricing for product comparison. Students will apply their knowledge in cooking labs.

TITLE: Health 7
Course Number: 0443
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: Students will develop an overall understanding of the Health Triangle and how each side relates to each other. Key Components: Refusal Skills, Bullying/Character, Drugs and Alcohol, First Aid and Safety

TITLE: General Music 7
Course Number: 0424
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: 7th grade music seeks to expand the students' horizons as far as musical taste and exposure gained in 6th grade music. Students will be provided hands-on experience with the technology in order to gain a first-hand understanding of the cutting-edge innovations that exist in the Music Technology realm. They will review musical notation and learn the basics of playing piano. They will be able to

demonstrate how electronic music can be produced or recorded. They will research and develop ideas for musical creations, as well as design and compose their own musical pieces. Such music creation will be explored for the variety of purposes in which it can be heard today: live performance, recorded performance, as a soundtrack to videos footage, along with other inventive avenues.

TITLE: Physical Education 7
Course Number: 1433
Prerequisite: N/A

Credit: 12 weeks
Grade: 7

Description: The Physical Education program provides each student with the opportunity to participate in a comprehensive and complete program consisting of skill development, lead up games, team sports, and physical fitness activities. The students receive instructions in rules, skills, and strategies associated with different sports as well as learning experiences involving physical conditioning activities. The students will also have opportunities to become involved in lifelong physical activities through individual sport units. The program promotes a spirit of cooperation, leadership, fair play and friendly competition.

TITLE: Digital & Environmental Solutions
Course Number: 0427
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: Students will explore alternative energy and global impacts effecting all humans on earth. A futuristic solar powered vehicle will be created from a recyclable plastic bottle and tested for performance against other students in the classroom. Photoshop computer software will be utilized by the students to develop and produce a 12-month full color calendar. A variety of digital media (scanner, cameras, I-phones...etc.) will be used to import images into their creation. Students will expand upon higher-order computer commands associated with layering, warping and infusion. Personal dates will add further customization of the calendar project. Students will also be exposed to the manufacturing environment (woodshop) to produce a wall shelf. The use of hand tools and machines will be used with a strong emphasis on safety. Students will take home a tangible wood project to display their accomplishments.

TITLE: Library and Information Literacy 7
Course Number: 1415
Prerequisite: N/A

Credit: 6 weeks
Grade: 7

Description: Students will continue to identify the criteria of literary genres and award-winning books with a focus on introducing diversity and cross-cultural literature for leisure reading. Students will expand their use of traditional and electronic tools, refining their research strategies, and be exposed to methods of incorporating research using multiple production techniques. They will focus on analyzing, evaluating, and synthesizing sources with an emphasis on correct documentation of sources. Students will begin to develop an understanding of citation formatting and integration. As digital citizens, students will continue to enhance skills by using current and emerging information and collaborative technologies, including the evaluation of those tools.

**6th Grade
LANGUAGE ARTS**

TITLE: English Language Arts 6
Course Number: 0147
Prerequisite: N/A

Credit: 1
Grade: 6

Description: This course is designed to emphasize reading comprehension, writing skills and methods of inquiry as found in the core of grammar and mechanics. The course will focus on the process of writing, skills and strategies for effective communication in all its forms. This course is aligned to PA ELA Common Core Standards.

**6th Grade
READING**

TITLE: Reading 6
Course Number: 6100
Prerequisite: N/A

Credit: 1
Grade: 6

Description: This course is designed for students to be able to comprehend and evaluate complex texts across a range of types and disciplines. This course is aligned to PA Common Core Standards.

MATH

TITLE: Math 6
Course Number: 0306
Prerequisite:

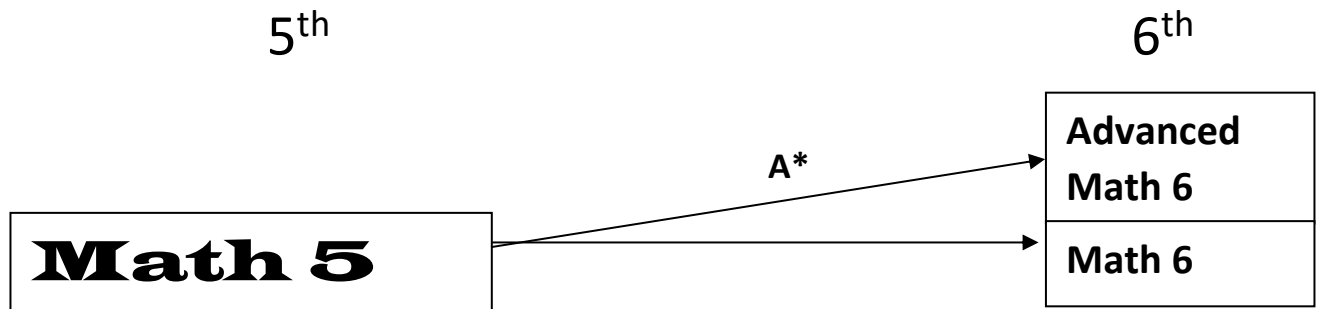
Credit: 1
Grade: 6

Description: Students are expected to have mastered the foundations of math. Fluent addition/subtraction, multiplication/division of whole numbers, fractions and decimals skills are strongly recommended entering sixth grade. Topics taught include integers, factors and multiples, fractions and decimals, ratios, rates and percentage, algebraic expressions and equations including the use of variables, geometry concepts and data analysis skills. Depending on level of understanding throughout the course of the year remedial or enrichment work may be assigned.

TITLE: Advanced Math 6
Course Number: 0308
Prerequisite: N/A

Credit: 1
Grade: 6

Description: The course is designed to provide incremental review and steady practice in order to prepare students for higher level mathematics courses. Topics taught include integers, factors and multiples, fractions and decimals, ratios, rates and percentage, algebraic expressions and equations including the use of variables, geometry concepts and data analysis skills. Upon completion of this course, students will be ready to enter pre-algebra.



***= Advanced/Proficient PSSA Score (must be above the median Proficient score), teacher recommendation with 90% or higher on class test scores and an A as the final grade.**

These are the course pathways. Exceptions to the prerequisite can be made with the agreement of the administrator, math department, counselor, student, and parent.

SCIENCE

TITLE: Science 6
Course Number: 0126
Prerequisite: N/A

Credit: 1
Grade: 6

Description: The 6th grade science class follows an integrated approach in order to meet Pennsylvania State Science Standards. Units covered in 6th grade include: Water on Earth, Forces and Motion, and Sound and Light.

SOCIAL STUDIES

TITLE: Social Studies 6
Course Number: 0206
Prerequisite: N/A

Credit: 1
Grade: 6

Description: Students will explore various aspects of the Eastern Hemisphere. Topics will include the Culture and Geography of various Countries. Students will gain an understanding of the Countries in Western and Eastern Europe, Africa, Asia and Areas of the Pacific such as New Zealand and Australia. All areas of study will include how the country is affecting the world today as well as map activities to tie into the beginning chapters of the year.

MUSIC ELECTIVES

TITLE: Band 6

Credit: 1

Course Number: 2000

Grade: 6

Prerequisite: Incoming Requirements

Description: This class is open to any qualified* 6th grade student and meets daily for one (forty-seven minute) period and is taught by a music teacher with background in instrumental music. 6th Grade Band is designed to teach middle school band students a variety of music compositions and arrangements meant for preparing instrumentalists to play the basic skills required of a 2nd year player. Students are graded on daily participation as well as evening concerts. Students are expected to play at a certain level to enter this course (new students should see "Incoming Requirements" or contact the band director before scheduling).

TITLE: Chorus 6

Credit: 1

Course Number: 2020

Grade: 6

Prerequisite: Prior experience in a vocal ensemble and/or recommendation of the director

Description: Sixth grade chorus is designed for entry-level singers as well as those who have achieved elementary choral skills. This is an elective course which meets and rehearses on a regular basis as part of the student's daily schedule. The chorus will perform a mandatory holiday concert in December and a mandatory spring concert in May. Once the student enrolls in the class, he or she may drop the course only during the first 4 weeks of the school year.

TITLE: Orchestra 6

Credit: 1

Course Number: 2010

Grade: 6

Prerequisite: determined by the instructor

Description: The middle school string orchestra class meets daily, and performs at least two public concerts per year. The ensembles perform orchestral music of varying styles & historic time periods: from the early baroque through modern day. In order to enroll, students must be able to play an orchestral string instrument up to their grade level, as determined by the instructor.

SPECIALS

TITLE: Personalized Learning 6

Credit: 1

Course Number: 9703
Prerequisite: N/A

Grade: 6

Description: Description: Personalized learning is an educational approach that aims to customize learning for each student's strengths, needs, skills and interests.

TITLE: Art 6
Course Number: 0420
Prerequisite: N/A

Credit: 12 weeks
Grade: 6

Description: Drawing basics which includes 3D and portraiture with an emphasis on development of characters and themes. A variety of media exposure.

TITLE: Digital Citizenship
Course Number: 0417
Prerequisite: N/A

Credit: 12 weeks
Grade: 6

Description: The Beginning Ideas in Computer Science curriculum exposes students to the power of computer science and how it can be used to impact their lives. Students are given the opportunity to **iterate** and **design** creative solutions to problems instead of just working with paper and pencil. Students learn how to **engage** one another as they work collaboratively to **apply** their ideas with computation. The Beginning Ideas in Computer Science curriculum allows students to **synthesize** their natural curiosity and interests with the tools of computer science. Students will learn to use Scratch 2.0 as a programming tool, while focusing on creating interactive quizzes.

TITLE: General Music 6
Course Number: 0410
Prerequisite: N/A

Credit: 6 weeks
Grade: 6

Description: 6th grade music seeks to expand the students' horizons as far as musical taste and exposure. Students will be provided hands-on experience with the technology in order to gain a first-hand understanding of the cutting-edge innovations that exist in the Music Technology realm. They will be able to demonstrate how electronic music can be produced or recorded. They will research and develop ideas for musical creations. They will design and compose their own musical pieces. Such music creation will be explored for the variety of purposes in which it can be heard today: live performance, recorded performance, as a soundtrack to videos footage, along with other inventive avenues.

TITLE: Physical Education 6
Course Number: 1435
Prerequisite: N/A

Credit: 12 weeks
Grade: 6

Description: The Physical Education program provides each student with the opportunity to participate in a comprehensive and complete program consisting of skill development, lead up games, team sports, and physical fitness activities. The students receive instructions in rules, skills, and strategies associated with different sports as well as learning experiences involving physical conditioning activities. The students will also have opportunities to become involved in lifelong physical activities through individual sport units. The program promotes a spirit of cooperation, leadership, fair play and friendly competition.

TITLE: Society and Technology
Course Number: 6444
Prerequisite: N/A

Credit: 6 weeks
Grades 6

Description: In this course students will examine and interpret how our society drives and is driven by Technology. They will gain a basic understanding of the Science, Math, and Engineering that goes into the technology that surrounds us every day. They will also take a look into the driving factors to the advancement of technology. As well as delve into the effects that past technologies have had on society, people, and the development of the technology of today. This will be accomplished through thoughtful class discussion, brief written assignments, quizzes, and hands on projects.

TITLE: Industrial Tech 6A
Course Number: 0442
Prerequisite: N/A

Credit: 6 weeks
Grades 6

Description: This program is exploratory in nature, exposing young adolescents to a wide range of academic, vocational, and recreational subjects. Our department embraces the areas of Science, Technology Engineering and Math (STEM). Students are highly encouraged to participate in all activities to discover their individual talents and interests.

The sixth grade Industrial Technology course provides the students with some of their first experiences working in a technological environment. Students will be exposed to machine safety, basic woodworking tools, machines and skills. An emphasis will also be placed on fractional measuring.

A variety of software will be introduced including: Solid Works, AutoDesk Inventor and Corel Draw. These technologies will be employed for the students to produce: a laser engraved ruler, Wooden peg game created in the woodshop then laser engraved. Students will also use one of the two CAD program to design, produce and race a magnetically levitated car while incorporating the STEM principles.

TITLE: Industrial Tech 6B
Course Number: 0441
Prerequisite: N/A

Credit: 6 weeks
Grades 6

Description: This program is exploratory in nature, bridging the gap between both boys and girls alike, while providing a wide range of academic, vocational, and recreational subject areas. Our department embraces the domains of **S**cience, **T**echnology **E**ngineering and **M**ath (STEM). Students are highly encouraged to participate in all activities to discover their individual talents and interests.

The sixth grade Industrial Technology course provides the students with some of their first experiences working in an advanced technological environment. Students will be exposed to machine operation basics & safety, fundamental woodworking tools along with graphical computer software skills. An emphasis will also problem-solving techniques and engineering.

Computer software such as Photoshop and Microsoft Word will be introduced to all students. These technologies will provide students with the ability to produce a safety poster / presentation - utilizing Word software, make a wooden rack project manufactured in the wood lab environment, and custom design a vinyl decal using Photoshop software. Students will also problem-solve both a land speeder and a team solar powered vehicle STEM project that requires brainstorming, data recording, journal keeping and math calculations / predictions.

TITLE: Library and Information Literacy 6
Course Number: 1414
Prerequisite: N/A

Credit: 6 weeks
Grades 6

Description: Students will expand their knowledge of literary forms and describe their characteristics, as they read and interpret works of both fiction and non-fiction for leisure reading. Students will learn to identify, evaluate, refine, and ethically integrate a variety of research sources into projects. Students will further develop knowledge of website navigation, research databases and other age appropriate technology. They will identify the qualities of a responsible digital citizen with regards to retrieval, evaluation, creation, and presentation of information.

TITLE: Family Consumer Science 6
Course Number: 0411
Prerequisite: N/A

Credit: 6 weeks
Grades 6

Description: Students in 6th grade will study My Plate and healthy eating habits. They will create a personal wellness plan to understand the importance of good health. Students will learn kitchen safety and sanitation, recipe reading, measuring and kitchen utensils. Students will apply their knowledge in cooking labs.