

**Hardin Middle School**

**8th Grade Course**

**Descriptions**

**2020-2021**



## **Core & Required Classes for 8<sup>th</sup> grade**

**MATH 8:** This is a yearlong course. Students study in a rigorous mathematics class with high expectations. Topics covered include a preview of algebra, properties of real numbers, signed numbers, solving equations and inequalities, graphs, slope, formulas, functions, systems of equations, exponents, sentences, radicals, polynomials, factorings, proportions, rational equations and quadratics.

**ALGEBRA 1:** The objectives of algebra 1 include the development of a foundation in algebra to prepare for further mathematics courses, a better understanding of the real number system, an understanding of the elementary notions of relations and inequalities, ability to interpret equations and equations and inequalities geometrically, facility in using precise mathematical language and symbolism and algebraic techniques to solve practical problems. Students can receive high school credit upon successful completion of this course. Eighth grade students must test into this course.. Teacher recommendation, course grades, and placement exam scores are used to determine placement in high school Geometry. ***Must have teacher permission to enroll.***

**ENGLISH LANGUAGE ARTS (ELA):** Eighth grade students will continue the study of grammar, literature, composition, library and research skills, spelling and vocabulary building. Basic literary forms are studied as well as essay format, sentence structure, and paragraph writing.

**U.S. HISTORY:** The social studies program in the eighth grade utilizes a scope of knowledge that includes topics from Reconstruction to the present such as government, wars, geography, economic growth, civil unrest and the continuing development of the American culture. This course emphasizes the skills of problem solving, critical thinking, cause and effect, debate, analysis of data and the evaluation of current events.

**EARTH SCIENCE:** Earth Science is the application of other sciences to the study of Earth. Units of study: geology, plate tectonics, astronomy & meteorology. All are applied to study of structure of earth, materials of earth, history of earth, & energy exchanges among earth.

**PHYSICAL EDUCATION & HEALTH:** The Physical Education Middle School program consists of a variety of team sports, individual sports, and fitness related games. Participation, sportsmanship, skill development, and team building are the major components of these activities. Lifetime wellness concepts are included to enable students to make informed decisions in regards to their own personal health.

**ACADEMIC LAB:** Every student is purposefully placed in academic lab based on the review of MAP scores, Galileo scores, summative course assessment scores, and teacher recommendation. During this time Leader in Me concepts are taught and reinforced throughout the school year.

## **Remedial Coursework**

**READING:** Students who are identified as needing extra support in Reading may be enrolled in this class. During the class, students will receive extra help to strengthen skills and knowledge in the core areas. This placement will be determined based on MAP scores, Galileo scores, summative course assessment scores, and teacher recommendations. (Not all 8<sup>th</sup> graders will be required to enroll in this class).

**MATH STRATEGIES I:** Students who are identified as needing extra support in Math Strategies I may be enrolled in this support class. During the class, students will receive extra help to strengthen skills and knowledge in the core areas. This placement will be determined based on MAP scores, Galileo scores, summative course assessment scores, and teacher recommendations. (Not all 8<sup>th</sup> graders will be required to enroll in this class).

**MATH STRATEGIES II:** Students that have completed Math Strategies I but are still identified by MAP scores, Galileo scores, summative course assessment scores, and teacher recommendation will be placed in this class.

## **Exploratory Classes**

**COMPUTERS:** In this course, students will discover practical applications using word processing skills, spreadsheet functions, presentation skills, and graphic techniques to create various publications such as a magazine cover, menu, and travel brochure. Students will also continue to develop research skills through the use of the Internet. Skills learned will benefit students for future personal use, education, and careers.

**ART:** This class will review & build on skills & concepts covered in Visual Art 7. Students draw, paint, sculpt in metal and clay, & create graphic designs in a variety of media. Students will focus on development in the areas of art making, history & criticism. Each unit is designed to give the opportunity to create an original work of art as they reflect on art & artists of the past & present.

**DRAMA:** Eighth grade drama develops skills taught in 7th grade drama. New students can learn the concepts taught in 7<sup>th</sup> grade, & experienced students can enhance their skills in drama. Acting activities focus on developing character, vocal expression, stage movement, memorization skills, improvisations, & monologue. Evaluation is based primarily on in-class performance.

**PLTW MEDICAL DETECTIVES:** Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a “crime scene.” They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

**PLTW APP CREATORS:** - App Creators introduces students to the field of computer science and the concepts of computational thinking through the creation of mobile apps. Students are challenged to be creative and innovative, as they collaboratively design and develop mobile solutions to engaging, authentic problems. Students experience the positive impact of the application of computer science to society as well as other disciplines, particularly biomedical science.

**ROBOTICS:** This is a beginning course in robotics. We will be utilizing various robotics kits and materials. The objective of this course is to introduce the student to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of a robot. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, program loops, decision-making, and timing sequences.

**\*\*PEER HELPERS 7<sup>th</sup> & 8<sup>th</sup> Grade:** This course is designed to develop communication & leadership skills, & how to reach out to help/encourage others. Skills developed: empathy, decision making, assertiveness, & problem solving. Students may serve as tour guides, & peer buddies.

**CONCERT BAND 8: (Pre-requisite - 7th Grade Band):** This class is for students who play at an 8<sup>th</sup> grade level & have at least two years of experience in band. The focus of this class will be on the further development of fundamental music skills & techniques learned in beginning band, as well as gaining an appreciation for music as a form of artistic expression. Students enrolled in this class will have the opportunity to participate in school concerts, music festivals, Jazz Band & other types of performances.

**JAZZ BAND: (Pre-requisite - 7th Grade Band):** This class is for students who play at an intermediate or advanced level & are interested in an introductory course on playing & performing in a Jazz Ensemble. The focus of this class will be on Jazz styles & techniques, as well as the history & culture of Jazz as an American art form. Any student selected to play in this ensemble **must also be enrolled concurrently in Concert Band 8**, with the exception of pianists, guitarists, bass guitarists or string bassists, & vocalists (although these instruments/vocals need instructor approval for enrollment). Students enrolled in this class will have the opportunity to participate in school concerts, music festivals, & other types of performances.

**ORCHESTRA:** Students must have two years of recent experience or permission of the instructor to enroll. Violin, viola, cello and string bass are taught. Students acquire performing skills necessary to enter high school orchestra in 9<sup>th</sup> grade. Students are responsible for providing an instrument, method book, & various supplies needed for participation. Supplemental materials & sheet music will be provided. Orchestra performance & small group skills are stressed with advanced playing technique being developed. At-home practice will be expected. Students enrolled in this class will have the opportunity to participate in school concerts, music festivals, & other types of performances.

**8TH GRADE TREBLE CHOIR: (Prerequisite: audition):** This course is a choral music performance class comprised entirely of female voices. Emphasis will be placed on the choral experience through individual vocal development and choral skills. Students will study music notation and develop sight-reading skills through daily sight-singing activities. Students will study two and three-part choral literature from all historical and cultural periods of music. Students will also study vocal technique and practice performing skills, including staging and movement. Students will be required to perform for a live audience at least two times during the academic year. Students enrolled in this class will have the opportunity to participate in school concerts, music festivals, & other types of performances.

**MEN'S CHOIR: (prerequisite: approval from instructor):** This course is a choral music performance class comprised entirely of male voices. Emphasis will be placed on the choral experience through individual vocal development and choral skills. Students will study music notation and develop sight-reading skills through daily sight-singing activities. Students will study two and three-part choral literature

from all historical and cultural periods of music. Students will also study vocal technique and practice performing skills, including staging and movement. Students will be required to perform for a live audience at least two times during the academic year. Students enrolled in this class will have the opportunity to participate in school concerts, music festivals, & other types of performances.

**FAMILY AND CONSUMER SCIENCE (FACS):** This course provides students the opportunity to learn essential life skills. It allows them to develop skills in food and nutrition and consumer resource management. Students will examine consumer rights and responsibilities and apply decision making skills to the purchasing of goods and services. Making healthy food choices and menu planning will also be explored. Students will demonstrate culinary skills required for safe food production while working in the kitchen. Cooperation, problem solving, and evaluation skills are enhanced during all lab experiences. Lab fee of approximately \$10 for upgraded materials for projects.

**INDUSTRIAL TECHNOLOGY:** This program is an 18 week course exploring industrial technology. The curriculum revolves around three major areas of study: communication, production, and transportation. This program responds to the needs of all students undergoing rapid physical, emotional, social, and intellectual growth of this middle school age group. This course is designed to provide active learning situations in technology emphasizing problem solving, creativity, and cooperation. Lab fee of approximately \$20 for upgraded materials for projects.

**A.P.E.X. – Advanced Program for Exploration:** **A.P.E.X.** is the 3<sup>rd</sup> **GATE** in the Gifted & Talented Education Studies (G.A.T.E.S.). The **A.P.E.X.** program builds upon knowledge & skills presented in elementary and 5-6 grade programs. The **A.P.E.X.** program is designed to promote research skills, problem solving, critical thinking & affective awareness. The units for middle school are interdisciplinary in nature & offer elements from the four core education areas, along with creative & fine arts elements. The Units are theme based and focus on real world questions & problems. Technology is used extensively, providing students access to computers, digital, still & video cameras & smart board technology. Students have access to computer programs such as Microsoft Word, Power Point, Publisher, Excel & Movie Maker along with source programs offered on the internet. Students enrolled in APEX will attend for ½ of a school day during the week.

**FRENCH LEVEL I:** This year long course is equivalent to the high school Level 1 course. The student acquires basic vocabulary concerning the family, food, travel, sports, and geography. Through the use of a text, tape recordings, videos, and other supplemental materials, the student learns to listen, speak, read, and write this lively language. Short studies of the French culture and the importance of French as an international language will be undertaken. Students can receive high school credit based on the successful completion of this course.

**SPANISH LEVEL I:** This year long course is equivalent to the high school Level 1 course. The student acquires basic vocabulary concerning the family, food, travel, sports, and geography. Through the use of a text, written activities, CDs/tapes, music, videos and guest speakers, the student learns to listen, speak, read and write in this lively language. Short studies of Hispanic culture and celebrations, with comparisons of several Spanish-speaking countries are emphasized. Students can receive high school credit based on the successful completion of this course.

**GERMAN LEVEL I:** This year long course is equivalent to the high school Level 1 course. Students will be introduced to grammatical structures of the language along with a basic vocabulary of high frequency words and phrases. Students will develop listening, speaking, reading, and writing skills, and study a variety of areas such as geography, social structures, differences in values and human relations between German and North American cultures. Students can receive high school credit based on the successful completion of this course.

**EXPLORATION OF WORLD CULTURES AND LANGUAGES:** In this semester class students will experience all three language offerings: German, French, and Spanish. Students will get an introduction to each language including phonics, basic conversation, numbers, colors, and geography.

**COMPETITIVE PE:**

This 7th and 8th grade course introduces skills, strategies and rules associated with team sports such as basketball, volleyball, soccer, softball, team handball and flag football, in a highly competitive environment. This course will also provide an opportunity to officiate and to enhance skills in team sports strategies. Students in this course will be constantly moving and involved in game play.

**\*\*All classes are strictly based on enrollment numbers. In past years, these classes have not had enough requests by students to include the classes in the schedule.**