

Harmony Middle School 2020 – 2021 Middle School Electives



Science, Technology, Engineering, and Mathematics Pathway

Through topics like coding and robotics, flight and space, and DNA and crime scene analysis, middle school students engage their natural curiosity and imagination in creative problem solving. Project Lead the Way (PLTW) Gateway is a strong foundation for further STEM learning in high school and beyond, challenging students to solve real-world challenges, such as cleaning oil spills and designing sustainable housing solutions. Using the same advanced software and tools as those used by the world's leading companies, students learn how to apply math, science, technology, and engineering to their everyday lives. (PLTW Gateway – Curriculum website)



Through our partnership with Project Lead the Way, Harmony Middle School is excited to offer the following courses in the STEM Gateway to Technology program.

Design & Modeling

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Grade 6th

Automation & Robotics

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

Grade 7th

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.

Grade 8th

Culinary Pathway.

Fundamentals of Culinary Careers

The content includes but is not limited to the development of leadership skills, communication skills, and employability skills; resource management; exploration of careers in the culinary field; the importance of health and safety in the culinary environment; and the use of technology in culinary-related careers. Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Grades 7th This course is paired with Health

Principles of Food Preparation and Nutrition and Wellness

High School Credit Course

Prerequisite: Fundamentals of Culinary

The content includes but is not limited to preparing students to understand the principles of food, selection and storage, basic food preparation, and selection of food services. It also includes but is not limited to selection, preparation, service and storage of foods. It allows students to use technology to practice meal management techniques directed toward nutritional food choices based on the life cycle. This course will provide an awareness of consumer issues relating to health and wellness.

Grades 8th Year long commitment

Agriscience Pathway

This program is a planned sequence of instruction consisting of the courses shown in the table below. For optimal success, it is recommended that students' progress through the program in the order presented.

Introduction to Agriscience

This course is the first in a sequence of courses designed to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Agriculture, Food and Natural Resource career cluster. The content includes but is not limited to agricultural literacy, importance of agriculture, the role of science, math, reading, writing, geography, history, and technology in agriculture, plants and animals, and sources of consumer goods from agriculture.

Grades 6th Semester long commitment

Exploration of Agriscience

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Agriculture, Food and Natural Resource career cluster. The content includes but is not limited to agricultural literacy, importance of agriculture, the role of science, math, reading, writing, geography, history, and technology in agriculture, plants and animals, and sources of consumer goods from agriculture.

Grades 6th Semester long commitment

Orientation to Agriscience

This course provides an overview of agriculture and will help students to be educated about their food supply. The content includes but is not limited to agricultural literacy, importance of agriculture, the role of science, math, reading, writing, geography, history, and technology in agriculture, plants and animals, and sources of consumer goods from agriculture.

Grades 7th Semester long commitment

Introduction to Agriculture, Food, and Natural Resources

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Agriculture, Food and Natural Resource career cluster. The content includes but is not limited to agricultural literacy, importance of agriculture, the role of science, math, reading, writing, geography, history, and technology in agriculture, plants and animals, and sources of consumer goods from agriculture. Reinforcement of academic skills occurs through classroom instruction and applied laboratory procedures.

Grades 7th Semester long commitment

Fundamentals Agriculture, Food, and Natural Resource Systems

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Agriculture, Food and Natural Resource career cluster. The content includes but is not limited to agricultural literacy, importance of agriculture, the role of science, math, reading, writing, geography, history, and technology in agriculture, plants and animals, and sources of consumer goods from agriculture.

Grades 8th Year long commitment

Business Technology Pathway

Computer Applications in Business 1

Computer Applications in Business 2

Computer Applications in Business 3

The purpose of this course is to provide students with the computer, digital, and information technology skills necessary for success in their future academic and occupational goals. In addition to fundamental computer information, the content includes but is not limited to digital technologies associated with web development, multimedia, word processing, spreadsheet, database, Internet communications, cybersecurity, and computer programming.

Grades 6th - 8th Semester long commitment

Health and PE

Physical Education

The purpose of this course is to provide a foundation of knowledge, skills, and values necessary for the development of a physically active lifestyle. The course content provides exposure to a variety of movement opportunities and experiences which includes, but is not limited to: Fitness Activities, Educational Gymnastics and Dance, and Team Sports. Students are required to take one semester per grade level, unless a PE waiver is filed.

Grades 6th - 8th Semester long commitment

Health

The purpose of this course is to provide students with the opportunity to gain the knowledge and skills necessary to become health literate and practice responsible behaviors to promote healthy living. This comprehensive course focuses on making wise personal decisions and respecting and promoting the health of others.

**students interested in the Culinary program will be paired with Health*

Grade 7th Semester long commitment

Fine and Performing Arts

Band

Students will develop foundational instrumental technique, foundational music literacy, and aesthetic musical awareness through rehearsal, performance, and study of high-quality band literature.

Grades 6th – 8th Year long commitment

Chorus

Students will develop vocal technique and skills, critical and creative thinking skills, and an appreciation of music from around the world and through time. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades 6th – 8th Year long commitment

Orchestra

Students will explore high-quality music literature written or transcribed for string orchestra. Study includes the development of foundational instrumental ensemble techniques, performance skills, music literacy, and aesthetic awareness. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source.

Grades 6th – 8th Year long commitment

Acting

Through improvisation, simple scripted scenes, performance projects, and/or practical application, students learn to identify what makes performances believable and explore the tools used to create, articulate, and execute them. Upon completion of this course, students have a strong foundation for future scene work, script analysis, and play production. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom.

Grades 6th – 8th Semester/Yearlong commitment

Visual Art

Students are introduced to the rigor and routine of the art production process including planning, producing, and reflecting on art. With an emphasis on studio arts, students explore a wide range of 2D and 3D media, skills and techniques, as related to contemporary and historical art perspectives. Projects may include but not be limited to drawing, painting, printmaking, collage, mixed media, pottery, and sculpture. Students develop technical skills, foster their expressive abilities and employ the use of the elements of art throughout the production process.

Grades 6th – 8th Semester long commitment

Foreign Language

Spanish 1

High School Credit Course

Spanish 1 introduces students to the target language and its culture. The student will develop communicative skills in all 3 modes of communication and cross-cultural understanding. Emphasis is placed on proficient communication in the language. An introduction to reading and writing is also included as well as culture, connections, comparisons, and communities.

Grades 7th – 8th Year long commitment

Spanish 2

High School Credit Course

Prerequisite: HS Spanish 1 or Teacher approved

Spanish 2 reinforces the fundamental skills acquired by the students in Spanish 1. The course develops increased listening, speaking, reading, and writing skills as well as cultural awareness. Specific content to be covered is a continuation of listening and oral skills acquired in Spanish 1. Reading and writing receive more emphasis, while oral communication remains the primary objective. The cultural survey of the target language-speaking people is continued.

Grades 8th Year long commitment

Advancement Via Individual Determination

AVID

Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic success skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.

Grades 6th – 8th Year long commitment

Additional information may be found on <https://www.avid.org/>

