



8th GRADE

**Course Selection Guide
2021-2022**

INTRODUCTION

The Mapleton Middle School 8th Grade Course Selection Guide outlines the courses available to our students. Information is also provided to assist students and their parents with future planning. We hope you find this document helpful as you consider your student's scheduling options. Please contact the school counselor, administrators, or teachers at any time throughout the registration process for assistance.

Every effort is made to ensure accuracy regarding the course information provided before the Course Selection Guide is printed. Since the Guide is printed so early for scheduling purposes, some changes in course offerings may occur for the school year.

COURSE OFFERINGS 2020-2021

All 8th grade students will take the following required courses:

- English Language Arts (ELA Lab may also be required)
- US History
- Science
- Math 8 OR Algebra I* (Math Lab may also be required)
- Success
- Physical Education (9 weeks)
- Art (9 weeks)
- Design and Modeling (9 weeks)
- Career Exploration (9 weeks)

Mathematics Information (All students will take either Math 8 or Algebra I)

MATH 8

Course Length: Year

This course will address concepts and skills found in the Ohio Learning Standards for Mathematics that provide further preparation for the study of Algebra I. Areas of focus will include linear equations; understanding the concept of a function and using functions to describe quantitative relationships; analyzing two- and three-dimensional space and figures; understanding and applying the Pythagorean Theorem; and working with irrational numbers, integer exponents, and scientific notation.

ALGEBRA I

Course Length: Year

This is an advanced course for 8th grade students. It will include the following topics: order of operations to simplify expressions; solve, check, and graph linear and quadratic equations and inequalities; solve systems in two variables; apply properties of exponents to simplify expressions and solve equations; and operations with polynomials.

Coursework will be designed to prepare students for the Algebra I End-of-Course exam which counts toward the accumulation of graduation points. Students will receive 1 high school credit for Algebra I, and the final grade will become part of their high school transcript and figured into a cumulative grade point average.

PLEASE NOTE! Requirements for 7th grade students who want to take Algebra I in 8th grade:

- A average in Math 7 with a score of 3, 4, or 5 on state test or B+ average in Math 7 with a score of 4
- teacher recommendation.

MATH 8 LAB

Course Length: Year

This course provides support and intervention for students in Math 8. It is specifically designed for students who may need the opportunity to work in smaller groups or who need additional remediation and support when learning new math concepts. Students will be scheduled into this course based on teacher recommendations, assessment data, and/or parent request.

ELA LAB

Course Length: Year

This course provides support and intervention for students in English Language Arts. It is specifically designed for students who may need the opportunity to work in smaller groups or who need additional remediation and support when learning new English Language Arts concepts. Students will be scheduled into this course based on teacher recommendations, assessment data and/or parent request.

SUCCESS

Course Length: Year

For the duration of this course, students will work directly with the 8th grade core content teachers to build a strong foundation of skills that will benefit them throughout middle school and beyond. Academic enrichment activities will be provided to all students to help ensure success in all classes. The Botvin LifeSkills Training program, a substance abuse and violence prevention program, will also be utilized throughout the year. As part of this program, students will learn about setting goals, making decisions, keeping friends, staying calm, and communicating with others.

CAREER EXPLORATION

Course Length: 9 weeks

Students explore their career interests through embedded activities. Career exploration strategies are opportunities for students to discover work environments and understand the various aspects of the workplace. Strategies include tools and instruments that help students understand and appreciate their strengths and interests. Students start plans for their future with career information and postsecondary education data. Plans include course selection and planning as well as career aspirations and goals. Students will be required to complete a job shadowing experience as part of this course.

DESIGN & MODELING

Course Length: 9 weeks

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. Using design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions. (STEAM)

8th Grade Electives

Note: Electives are subject to availability. Some courses may not be offered or available to all students depending on factors such as course demand, available space in a student's schedule, or the overall curricular needs of the school.

7TH & 8TH GRADE BAND

Course Length: Year

The primary goal of the Mapleton Middle School band is to provide young people with an experience in instrumental music that is both enjoyable and educational. Students will participate in a variety of instrumental performances throughout the year. Participation in the middle school band program prepares students to be members of the high school marching, concert, and pep bands.

7TH & 8TH GRADE CHOIR

Course Length: Year

Choir is a course that provides the opportunity for students to excel in vocal music. Students will participate in vocal performances throughout the year. Participation in the middle school choir program prepares students to be members of the high school choir.

CURRENT/CONTEMPORARY ISSUES

Course Length: 9 weeks

The goal of this class is to give students the opportunity to understand and explore local, national, international, social and political issues in a meaningful and active way. During the nine weeks, students will stay up to date on current issues and trends. Because the subject of this class is "contemporary," topics will be added and subtracted depending on current news.

CONSPIRACY THEORIES

Course Length: 9 weeks

This class will allow students to explore US conspiracy theories in an informed, critical, and engaging manner. Activities include background research for and against conspiracy theories, critical website analyses, and student presentations.

THE HOLOCAUST

Course Length: 9 weeks

Designed for the more serious student of history, this course will explore the policies, practices, and events that led to the death of over 6 million Jewish people. Students will also discuss the impact and legacy of one of the darkest moments of European History.

MEDICAL DETECTIVES

Course Length: Semester

In this first course of the Biomedical Pathway, 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. Students who took this course in 7th grade cannot take this course again in 8th grade. (STEAM)

ADVANCED MEDICAL DETECTIVES

Course Length: Semester

Prerequisite: Introduction to Medical Detectives

In this second course of the Biomedical Pathway, students will build upon the skills they learned in Introduction to Medical Detectives. They will deepen their knowledge of human body systems, DNA, and genetics. Learning through hands-on projects and labs, students will gain the foundation needed for the high school level biomedical classes. (STEAM)

AUTOMATION & ROBOTICS

Course Length: 9 Weeks

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. Students who took this course in 7th grade cannot take this course again in 8th grade. **This course is a required for students who take Robotics Team.** (STEAM)

ROBOTICS TEAM

Course Length: Year

This advanced course is for students who have had previous experience with automation and robotics. Students will continue to learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students will continue to enhance their skills through the VEX Robotics® platform in preparation for robotics competitions. Students in this class are required to be part of the robotics competition team. Students may repeat this course. **Students who take this course must also take Automation & Robotics (can be taken concurrently).** (STEAM)

AGRICULTURE, FOOD & NATURAL RESOURCES (AFNR)

Course Length: Year

This is the first course in the Agricultural and Environmental Systems career-technical pathway. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

PRE-ENGINEERING CAD SOFTWARE

Course Length: Semester

Using Autodesk Inventor, students will be introduced to computer aided drawing software that is used in high school engineering classes. As a result, this course is strongly encouraged for anyone thinking about perusing and engineering pathway. Students will use CAD software to create items and then have the opportunity to use 3-D printers to see the end results. Students will be required to give presentations on their projects.