Marcellus Middle School Course Description Guide

2024-2025 Academic Year



English

English 6A/B

In this course students will develop strength in reading, writing, speaking, listening and viewing skills. They will increase their ability to analyze and synthesize information, increase reading ability and become a more proficient writer.

English 7A/B

In this differentiated literature and language program students will study short stories, classical mythology, nonfiction, drama, and poetry. Students will complete a separate vocabulary program, complete assorted creative and expository writings, respond to prompts, and maintain a journal. In addition, students will investigate the parts of speech and the parts of the sentence.

English 8 A/B

Students will work in all strands of English/language arts curriculum: reading, writing, grammar conventions, listening, speaking and viewing. Students will actively participate in a wide assortment of genres of literature, grammar and usage conventions, vocabulary development and formal/informal forms of writing. Strategic use of films and videos will also enrich cultural and media literacy.

Mathematics

Math 6

Students will shift their focus from whole numbers to integers and rational numbers. This will be the foundation for the algebra expectations. Topics will include ratios and rates to solve problems, working with rational numbers, and including negative numbers and division of fractions.

Math 7

This course is designed to help students improve their computational and problem solving skills. Topics studied in this course will fall into the categories of the number system, ratios & proportional relationships, expressions & equations, geometry, and statistics & probability.

Pre-Algebra

Students will gain an understanding of the number system, expressions and equations, geometry skills, statistics and probability, arithmetic with polynomials, creating equations, and reasoning with equations

Algebra (1 year, each semester .5 credit)

The course emphasizes algebraic language, structure, concepts and skills. Major topics include algebraic properties and the real number system with an emphasis on the application of basic operations, functions and their graphs, linear equations and inequalities, quadratic equations, linear regression and modeling, systems of linear equations and inequalities, polynomial and

factoring, algebraic fractions and real world applications.

Science

Science 6A/B

6th grade science is an integrated science course. The course is guided by the Next Generation Science Standards (NGSS). Students will learn science in the areas of biology, chemistry, physics and earth science. The course consists of the following six units (adapted from Standard's middle school NGSS curriculum):

Unit 0 - Introduction to Group Work

Unit 1 - Exploring Earth

Unit 2 - Exploring Life

Unit 3 - Understanding Matter

Unit 4 - Understanding Energy

Unit 5 - Electricity and Magnetism

Students will keep an interactive science notebook and will participate in group activities, group projects, individual projects, note taking, writing and carrying out experiments and arguing from evidence.

Science 7A/B

7th grade science is an integrated science course. The course is guided by the Next Generation Science Standards (NGSS). Students will learn science in the areas of biology, chemistry, physics and earth science. The course consists of the following six units (adapted from Standard's middle school NGSS curriculum):

Unit 0 - Introduction to Group Work

Unit 1 - Setting Things in Motion

Unit 2 - Extreme Living

Unit 3 - Nature via Nurture

Unit 4 - Adapt or Die

Unit 5 - Mimicking Nature's Design

Students will keep an interactive science notebook and will participate in group activities, group projects, individual projects, note taking, writing and carrying out experiments and arguing from evidence

Science 8A/B

8th grade science is an integrated science course. The course is guided by the Next Generation Science Standards (NGSS). Students will learn science in the areas of biology, chemistry, physics and earth science. The course consists of the following six units (adapted from Standard's middle school NGSS curriculum):

Unit 0 - Introduction to Group Work

Unit 1 - Colossal Collisions

Unit 2 - A Balanced Biosphere

Unit 3 - Matter Matters

Unit 4 - Save the Andes!

Unit 5 - Using Engineering and Technology to Sustain our World

Students will keep an interactive science notebook and will participate in group activities, group projects, individual projects, note taking, writing and carrying out experiments and arguing from evidence.

Social Studies

Social Studies 6 A/B

This course explores the geography of the world. World regions are explored using the five themes of geography: location, region, place, human environment interaction, and movement. The students learn about the physical and political features, government, economic growth, and diverse cultures of these regions.

Social Studies 7 A/B

This course covers the beginnings of human civilization. Students will examine several ancient civilizations including Babylon, Egypt, Sumer, Greece, Rome, China, and Medieval Europe. Students will learn the origins and spread of Judaism, Hinduism, Buddhism, Christianity, and Islam. Focus will be applied to the development of technology, ideas, education, trade, agriculture, and the everyday lives of the people who lived during the various times.

Social Studies 8 A/B

Students will gain an understanding of the history of the early United States through Industrialism. Students will learn how the events and politics of this time changed the course of U.S. history to the current day.

Electives

Astronomy (7th and 8th grades)

This elective course will include a study of Astronomy (including planetary modiums, constellations, and laws), and basic geosciences, including weather, geology, oceans, topographic maps, and basic ecology.

Composition

This course provides extra experience in writing for various audiences and purposes. Students will work to improve their written expression through the study of organizational elements, details, word choice, vocabulary, grammar and punctuation instruction. By the end of the course students should be able to write multi-paragraph pieces that may be in the form of research papers, essays, stories, descriptions, dialogue, letters, narrative of personal experiences, summaries, and other writing formats. Literature, news articles, and magazine articles may be used to stimulate the students' imagination, focus attention, and to prompt writing activities. Students will conduct a short research project as part of the course.

Composition/Great Books

This course will explore timeless literary works that have shaped cultures, societies, and ideas across the globe. By reading classic novels, plays, poems, and essays, students will engage with thought-provoking themes, complex characters, and profound moral questions.

Throughout the course, students will analyze these texts through in-depth discussions, develop critical thinking skills, and learn to appreciate diverse perspectives. Paired with the reading, students will enhance their writing abilities by crafting various compositions, such as literary analyses, persuasive essays, creative pieces, and reflective responses. They will also focus on building strong thesis statements, organizing arguments, and mastering grammar and style.

Human Growth and Development 7

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. The program's learning experiences are designed to give the student's an understanding of the different body systems, along with providing them with the knowledge to make healthy nutritional choices. The program also explores how to react in emergency situations.

Health 8

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. The program's learning experiences are designed to give the student's an understanding of the different body systems, along with providing them with the knowledge to make healthy nutritional choices. The program also explores how to react in emergency situations.

Life Skills

This class is designed to equip middle school students with essential skills that promote personal growth, responsible decision-making, and effective communication. This course covers a wide range of practical topics that will help students navigate the challenges of adolescence and prepare for their future roles in society. Practical life skills, like managing personal finances, basic cooking, and basic sewing, will be taught to ensure students can function responsibly in everyday life.

Math Applications

The Math Applications class is designed to show students how mathematical concepts apply to real-world situations and practical problem-solving. In this course, students will explore math beyond the textbook, focusing on how it connects to everyday life, technology, science, engineering, and other fields. This hands-on, project-based class encourages students to see the relevance of math in various careers and everyday activities, fostering a deeper appreciation for the subject.

PBL Explorers

This class is an innovative, hands-on course designed to engage students in real-world challenges through collaborative, inquiry-based projects. In this class, students will take on interdisciplinary projects that require them to apply knowledge and skills from various subjects. Projects are assigned that will begin with a driving question or challenge that sparks curiosity and encourages students to investigate solutions. Working in teams, students will research, problem-solve, and create products or presentations that reflect their learning. Along the way, they will develop critical 21st-century skills such as collaboration, communication, creativity, and critical thinking.

Physical Education 7

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. Discussions include peer recognition of potential issues, and how to access support services. Communicable and non-communicable diseases are also discussed. The students receive instruction on the importance of developing healthy eating habits and discuss decision-making skills that foster wellness.

Physical Education 8

The Middle School Health curriculum promotes an understanding of sound mental/emotional, physical, and social well-being, and provides instruction that is aimed to help our students live a healthy lifestyle. Students study the impact of steroids, alcohol, tobacco, and other chemical abuse on the body. Discussions include peer recognition of potential issues, and how to access support services. Communicable and non-communicable diseases are also discussed. The students receive instruction on the importance of developing healthy eating habits and discuss decision-making skills that foster wellness.

Band 6 A/B

6th grade band is an introductory class where students will study all facets of instrumental music, including rhythmic and tonal studies, genre, style, interpretation, intonation and tone quality.

Band 7&8 A/B

Middle School Concert Band is open to instrumentalists in grades seven and eight who want to further their study of instrumental music. In band, students will be studying all facets of instrumental music, including rhythmic and tonal studies, genre, style, interpretation, intonation and tone quality. This course develops additional skills necessary for students to perform in the High School Band

Drama (7th and 8th grade)In this course, students will learn about the basic elements of dramatic arts. Participants in the course will be introduced to the format of play writing and concepts. Short performances, both in a small group and class format, will be done in the course. Students will hone skills they utilized in this class to develop their public speaking and presentation skills.

Great Books/Writing Lab

Students will analyze several classic novels covering various genres. Additionally, students will learn basic terminology in order to analyze and discuss the novels. Students will hone their reading skills by engaging in classical and current texts. They will also continue to improve their written skills by writing about concepts discussed in the course. Presentations and assignments associated with reading material will be required. Students may analyze the same work in both the written and audiovisual medium

Current Events

Current Events introduces students to various issues facing the world today. Students will explore global economic systems, human rights, world health, environmental issues, and the role of the United States and the United Nations in a changing world. This class is designed to eliminate much of the confusion surrounding these issues and allow students to form their own opinions on matters that affect their world. Students will evaluate the issues and propose solutions from a variety of perspectives.

Art

Middle school art classes stress problem-solving skills and using one's mind to analyze, synthesize, and evaluate art. Students are introduced to art production, art history of many cultures, art criticism, and aesthetics. Major areas to be studied include painting, drawing, sculpture, textile design, printmaking and ceramics.

Introduction to Music Theory

Designed for students who seek to enrich their knowledge of the fundamentals of music. Students will gain an understanding of how elements of music interact to create musical style and effect, students will better appreciate how music is brought to life and its ability to communicate to others.

Introduction to Agriculture

This course gives students a background in natural resources and related career opportunities. It addresses the biological and environmental issues within our state, the history of natural resources, soils, water conservation as well as forestry. In the wildlife section, student experience will involve ecological principles, habitat management, domestic animal life histories, animal anatomy, animal production, fish and wildlife values, and their effects on the environment. Students will gain reinforcement learning on science standards.

Edmentum Courses

Virtual Partnership Courses

Keyboarding Enrichment: Keyboarding offers both beginner and intermediate levels of typing. Each student will be assigned a level according to age. In order to receive

credit for this class, the lessons of the regular program must be completed by the end of the semester, then the practice and activities continue into one of the eight follow up programs within our keyboarding platform, in addition to the 900+ activities and lessons for students to explore and improve.

K-12 / Elective / Platform: Typing Club

World Language: This class has a focus in studying one of several foreign language options available through the virtual tools applied in the class of either Rosetta Stone, Rosetta Stone Jr., or Duolingo. With the variety of platforms available for the study of world language, a platform could be easily fitted to the needs of the students. Rosetta Stone works through a strategy of immersion in teaching the foreign language, while Duolingo approaches the teaching strategy on more of a traditional circular strategy for teaching the language.

Both platforms are available for either age group, with Rosetta Stone having a junior platform for the younger participants. Consistent participation and progress is expected for all participants even though a varied pace for each student may exist.

K-12/ Elective/ Platform: Mondly, Rosetta Stone, Rosetta Stone Jr.

Health and Fitness: Through the application of various virtual resources, such as Ed Puzzle and/or BrainPOP, students get to not only learn about several issues surrounding health and fitness, but also engage in an online format with virtual class peers in discussion and blogging of weekly topics, guided by the instructors of the course. The course will also include the completion of an exercise log of outside fitness activity.

K-12 / Elective / Platforms: ED Puzzle

Current Events: This program features nonfiction articles with quizzes for grades 3rd - 12th. Reading levels can be adjusted within five different levels while keeping the same content. Progress is tracked and recorded. Three new news articles are added daily to their database of thousands. The study of these nonfiction, current event articles is implemented through the virtual tool of Newsela.

3-12 / Elective / Platform: Newsela

Computer Coding I (3rd Grade and up) – A computer programming course for beginners that teaches the coding in languages used within the professional arena, such as Python, JavaScript and Java, while in a kid-familiar Minecraft and/or Roblox environment that kids enjoy already. Various lessons, activities and program design all

occur within age-appropriate environments with online teachers and mentors to coach along.

Computer Coding II (7th Grade and up) – An advanced version of coding for our Junior High and High School students. Students are challenged to learn and develop various computer modules through the application of different computer programming languages. The full curriculum is broken down into different courses, intended to be completed from year to year in sequence. Course choices through our virtual course provider, Simply Coding, include Java Script Game Design 1 and 2, Python Multiplayer Adventure, Intro to Java, Android Apps in Java

3-12 / Elective / Platform: CodaKid(Coding I), Simply Coding(Coding II)

Communication Skills Enrichment I: This course tackles the many facets of communication and takes kids through an adventure, exploring the different areas of life skills, the arts and basic communication necessities in an interactive, graphical approach. This section of the course is based in the virtual environment of ABC Mouse as well as offline opportunities for kids to extend their learning opportunities.

K only / Elective / Platform: ABC Mouse

Communication Skills Enrichment II: A second course, that can be taken simultaneously with the one above, that extends the kids opportunities into exploring life skills and communications on the more content-robust platform of MIAcademy. Both online and offline opportunities available for kids to extend their learning to another level, beyond the classroom.

K only / Elective / Platform: MIAcademy

Music Theory Enrichment: This course is a highly effective, yet fun environment for students to develop music theory and practice through engaging activities. The website, Ed Puzzle - Music, contains hundreds of learning games, activities and videos of varying levels, all carefully planned to gain mastery of the elements of music theory, ear training and rhythmic skills in an exciting, challenging environment. In addition to the many activities available through the virtual resources, an online practice record log keeps track of outside music activities that kids participate in.

K-12 / Elective / Platform: ED Puzzle, Classics for Kids

Essentials of Business: A course based on a variety of different virtual resources, including Schoology and/or Courseware, which teaches and encourages students to explore the world of business and publications, at an age appropriate level. A variety of projects, case studies, and activities bring students through different principles of general business and production.

K-12 / Elective / Platform: Schoology, Courseware(Edmentum), Khan Academy

Virtual Art I (K – 6^{th}) – Taking advantage of the Ed Puzzle environment, this Virtual Art I course is set for the K through 6^{th} grade level and takes the students through the creation of a variety of crafts and projects that they create as they view different instructional videos and demonstrations.

Virtual Art II (7th – **12**th) – This course, developed more for the older students, focuses on drawing and drawing techniques through the creation of a *Marvel character* drawing journal. This journal, then, is posted to each student's electronic portfolio through scanning and digital imagery.

K-12 / Elective / Platform: ED Puzzle, Artsonia

Technology Lab I - This course provides students instruction designed to improve skills through a variety of virtual resources. The skills of the students are intended to be extended and enriched through a variety of different activities, games and projects geared toward the grade level. The course uses the game of chess, coupled with puzzles, lessons, videos and articles to teach students about strategy, tactics and perseverance.

Technology Lab IIa - Students taking this course will explore a number of topics ranging from organizational skills, cooperative activities, basic culinary arts, and food/diet culture.

Technology Lab IIb - Students will explore and experiment with several different methods of how things work and fit together. In the investigation side of things, past projects, inventions and other similar technology developments will be researched, inspiring new thinking for everyday objects.

Technology Lab IIc - Students taking this course will explore the world around us in the name of travel. A number of topics ranging from organizational skills, planning, culture, and highlights of traveling around the world, both geographic and artistic.

Technology Lab IId – Students will explore things and processes from a non-linear perspective. With exercises and observations of such items and processes, students will explore and develop "out of the box" thinking in approaching problems and solutions.

Technology Lab IIe – A look at life and how it has changed over the last two centuries, from cabin building to technology, this course allows students to see how things were in the 1800's and evaluate the change and development into our days now. What are the differences in ideology, construction and even concepts are all considered in the travel across time.

K-12 / Elective / Platform: Chess Kids, ED Puzzle

Technology Lab Enrichment Illa: This class explores under the sea through video-based program lessons from the Ed Puzzle environment, that include multiple choice, true/false and open-ended questions built into the video for comprehension. We will explore many creatures like sharks, sea turtles, walruses, and whales plus ocean habitats like coral reefs. Activities and/or worksheets linked for extra learning and assessment follow up for each topic of study. This course is intended for the K through 6th grade audience.

Technology Lab Enrichment IIIb: This class explores under the sea through video-based program lessons from the Ed Puzzle environment, that include multiple choice, true/false and open-ended questions built into the video for comprehension. This course extends the study and investigation of the many creatures like sharks, sea turtles, walruses, and whales plus ocean habitats like coral reefs. Activities and/or worksheets linked for extra learning and assessment follow up for each topic of study. This course is intended for the 7th and 8th grade audience.

Technology Lab Enrichment Illc: This class explores the large world of land animals through video-based program lessons from the Ed Puzzle environment, that include multiple choice, true/false and open-ended questions built into the video for comprehension. We will explore the many different families of land animals that roam our earth, including the investigation of their natural habitats. Activities and/or worksheets linked for extra learning and assessment follow up for each topic of study. This course is intended for the K through 6th grade audience.

Technology Lab Enrichment IIId: This class takes the prior knowledge of animals, nature and outdoor life and explores lessons and activities through video-based program lessons from the Ed Puzzle environment, that include multiple choice, true/false and open-ended questions built into the video for comprehension. We will explore different outdoor living and survival skills with a nature-based approach on content. Activities and/or worksheets linked for extra learning and assessment follow up for each topic of study. This course is intended for the K through 6th grade audience.

K-8 / Elective / Platform: ED Puzzle

Khan Academy Personal Finance

This virtual course includes instruction on saving, budgeting, interest and debt, investments and retirement, income and benefits, housing, car expenses, paying for college, and keeping your information safe.

9-12/ Elective/ Platform: Khan Academy

Khan Academy Finance and Capital Markets

This virtual course covers topics such as interest and debt, inflation, taxes, accounting and financial statements, and current economics.

9-12/ Elective/ Platform: Khan Academy

Khan Academy SAT Review

A virtual resource course that provides an in depth review of test taking skills with styles and questions often seen on the SAT or ACT.

9-12 / Elective / Platform: Khan Academy

Khan Academy Computer Programming

This virtual course starts with the basics in programming and includes instruction in drawing, animation, games and webpage design.

7-12 / Elective / Platform: Khan Academy

Khan Academy Hour of Code

This virtual course includes instruction on program drawings, webpage design and data manipulation.

6-12 / Elective / Platform: Khan Academy

Khan Academy Health and Medicine

A virtual course that includes instruction on the systems in the body, including diseases, mental health and current events in health and medicine.

9-12 / Elective / Platform: Khan Academy

Edmentum Electives