

2016-2017

Carman-Ainsworth Middle School



6th-8th Grade Course Descriptions

6th Grade Course Offerings

Science (full year)

The Sixth Grade Science program includes a study of cells, how they grow, develop and reproduce; the continuity of life which investigates how characteristics of living things are passed on through generations and how life evolves; forces in motion, which studies how matter changes and relates to energy, and also, how things around us move using energy and energy conservation; the Earth's surface and hydrosphere, how they are changing and being impacted by humans and technology.

Social Studies (full year)

Sixth Grade Social Studies is designed to give the student a basic knowledge and appreciation of other cultures in the Western Hemisphere. It stresses the relationship of man and his environment. The course embraces studies in the social sciences including physical geography, history culture and economics. Students will develop geographic skills, including the ability to use and understand maps and globes. Current events that help develop insights into today's rapidly changing world will be included. The basic areas studied include Canada, United States, Central and South America, Europe, Russia, Australia, and Oceania.

Language Arts-Reading (full year)

Sixth Grade Reading is an integrated language arts course that develops skills in reading, writing, speaking, listening and viewing, as they relate to literature. During the course, students will increase their abilities to analyze and synthesize information, while comprehending and appreciating narrative and informational text. The course covers such topics as:

- Literary elements and structures of a variety of narrative text
- Text features and organizational structures of a variety of informational text
- Reading strategies
- Vocabulary building
- Writing in response to literature
- Grammar concepts
- Spelling concepts

Language Arts-Writing (full year)

Sixth Grade Writing is a course that develops skills in the craft, strategies, and qualities of good writing. The course is structured in a writer's workshop format where students write daily and regularly cycle through the writing process. Students compose in both narrative and expository genres. The course covers such topics as:

- Personal narratives
- Essays
- Fiction
- Poetry
- Memoir
- Research report
- Grammar concepts

Math 6 (full year)

This class is designed for the majority of sixth grade students. During the course of the year, students will learn the following mathematical skills and concepts that are identified as appropriate for sixth grade students by the Michigan Department of Education: operating with fractions, representing rational numbers with fractions, decimals, and percentages, developing proportional reasoning, solving basic algebraic equations, understanding the basic geometric properties of lines, angles, and triangles, understanding and applying the concepts of congruence and basic transformations, exploring volume and surface area of rectangular prisms, and understanding and solving simple probability problems.

Accelerated Math 6 (full year)

Accelerated Math 6 is a course that covers the same content as *Math 6*, but moves at a more accelerated rate, allowing students to additionally complete the first unit of 7th Grade coursework by year end, preparing students to be able to take *Accelerated Math 7* in 7th Grade.

Math Lab 6 (full year, required if recommended by teacher)

Math 6 Lab is in addition to the sixth grade *Math 6* course. MEAP and performance criteria will aid in identifying students needing the additional time with the key foundational math concepts. A hands-on approach will be used to review operations with integers and fractions, to find factors and multiples, and to solidify work with ratios, percents, and proportions as needed to support students in their learning of the 6th Grade topics within the strands of number and operations, algebra, geometry, and data and probability. There will be added emphasis on understanding the key math vocabulary and concepts, in conjunction with the current *Math 6* course work, as needed.

General Music (1 semester)

6th grade general music is an extension of the elementary general music class with an emphasis on choral performance skills. Students will learn to read music, engaging in activities that include rhythm reading, solfege, and sight-singing. Students will also be learning music theory and history. Students may be required to participate in an end of trimester performance.

Physical Education (1 semester)

Sixth grade physical education is an introduction to physical fitness and lifetime activities through active participation. Students will participate in soccer, basketball, volleyball, floor hockey, track, tennis, softball, badminton, archery, flicker ball, racquetball and paddleball.

Theatre (1 semester)

Sixth grade students will have a blast experiencing performance fun including creative drama, theatre games, role playing and more.

Advanced Computers (full year)

In advanced computers students will learn various types of software and technology. Some of the software that will be taught is Adobe Premiere, Adobe Photoshop, Adobe Sound Booth, Digital Juice, Teleprompt software, and Microsoft Office. The students will use computers, digital

cameras, digital video cameras, a tricast, tripods and camera booms. Instruction will be divided up into 10 sections. Each section will create a segment that is part of the weekly broadcast. This class will also create a video yearbook that will be available for purchase at the end of the school year. Students who take this class need to be creative and meet strict deadlines. This class will require students to have a personal flash drive.

Project Lead the Way (PLTW) (1 semester)

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 while 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. Students also trace the history, development and influence of automation and robotics as they learn about mechanical systems, energy transfers, machine automation, and computer control systems.

Introduction to Computer Science (ICS) (1 semester)

Introduction to Computer Science (ICS) is a semester course where student team's work through modules to create an Android interface to solve a problem the team defines. Students learn fundamental computer science (CS) concepts using MIT App Inventor. The course aims to develop computational thinking and build student excitement. Several days in each module are targeted to build career awareness about computing skills in all fields and to improve students' cyber hygiene.

Band (full year)

Pre-Requisite - 5th Grade Band

Sixth grade band is open to instrumental music students who have successfully completed 5th grade band or by permission of the instructor. Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history. Band is a yearlong course.

String Orchestra (full year)

Sixth Grade String Orchestra is open to any student that wishes to learn to play a stringed instrument. String Orchestra instruments include: violin, viola, cello and bass. Students will be encouraged to obtain their own instruments. Prior experience is not necessary. Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

7th Grade Course Offerings

English 7 (full year)

Seventh Grade Language Arts is an integrated ELA course that continues to develop students' strengths in reading, writing, speaking, listening and viewing skills. Students read and write for a variety of purposes, as they increase abilities to analyze and synthesize information, to read for meaning and to become more proficient writers. The course covers such topics as:

- Literary elements and structures of a variety of narrative text
- Text features and organizational structures of a variety of informational text
- Reading strategies
- Vocabulary strategies
- Writing in response to literature
- Writing in both narrative and informational genres
- Grammar concepts

Accelerated English 7 (full year)

(Pre-Requisite - Teacher Recommendation)

This class is intended for highly motivated 7th grade students who show a potential for performing at high levels and exhibit a strong capability in language arts. Students will build on reading, writing, speaking and listening skills learned in previous grades, but move at a faster pace than in the English 7 class. To meet the expectations of the class, Accelerated English students will be expected to spend more time reading and writing outside of class. They will read additional novels throughout the school year and will also be required to do a summer reading project prior to the start of school in the fall. ***Students must have a recommendation from their 6th grade teacher to sign up for the course.***

Science (full year)

The seventh grade Science program includes a study of matter, its forms and changes; investigations in waves and energy, including the interrelationship between them; our fluid earth and human activities, exploring the relationship between the sun/weather and humans/earth and the study of structures and processes of living things, with the investigation of cells.

Social Studies (full year)

The 7th grade social studies curriculum introduces students to cultures of the East, with emphasis on the contemporary geography of Africa and Asia. Through the study of geography students learn the locations of significant places in each of these world regions; explore cultural and natural features that characterize each region; trace movement of people, ideas, and products within the region; and discover ways that regions can be divided into sub-regions. Historical background is provided to enable students to understand how a region developed from the past to the present. Differences in governments and economics are examined. The economy of each region and its role in the global economy is explored with special attention paid to economic ties with the United States. Students examine public issues of global significance in these regions and work to resolve them through study, discussion, and writing. Using a variety of media, students compile, analyze, and present geographic and economic data pertaining to the regions.

MATH 7 (full year)

This course is designed for the majority of seventh grade students. During the course of the year, students will learn the following mathematical skills and concepts that are identified as appropriate for seventh grade students by the Michigan Department of Education: understand and solve

problems involving rates, ratios, and proportions, compute with rational numbers, understand the relationship between linear and directly proportional relationships, combine algebraic expressions and solve equations, understand and solve problems related to the concept of similar polygons, represent and interpret data using graphs, and calculate basic statistics for a given data set.

Accelerated Math 7 (full year)
(Pre-Requisite - Please see list below)

This course is designed to prepare students for taking *Algebra I* in eighth grade. *Accelerated Math 7* will address the above 7th Grade math topics at an accelerated rate, allowing time for students to also study the necessary 8th Grade math topics that are now pre-requisite to the Algebra I course content expectations, as defined by the state of Michigan. The 8th Grade math topics studied include percent change, simple interest, using the Pythagorean theorem to find distances in the coordinate plane, calculating area and perimeter of circles and complex two-dimensional shapes, calculating volume and surface area of common three-dimensional shapes, performing reflection, rotation, and dilation transformations in the coordinate plane, solving and graphing systems of linear equations and inequalities, graphing, factoring, and solving quadratic equations, and understanding properties of other non-linear functions as they're represented with tables, graphs, and equations.

Math Lab 7
(Full year, required if recommended by teacher)

Math 7 Lab is designed for those seventh grade students who need additional time and support with the key foundational math concepts in *Math 7*. A hands-on approach will be used to review operations with integers and fractions, to find factors and multiples, and to solidify work with ratios, percents, and proportions as needed to support students in their learning of the 7th Grade topics within the strands of number and operations, algebra, geometry, and data and probability. There will be added emphasis on understanding the key math vocabulary and concepts, and teaching support will be provided in conjunction with the current *Math 7* course work, as needed.

Computers (1 semester)

Students will learn about many different software programs such as Typing Tutor, Internet Explorer, Microsoft Word and Microsoft Office. Students who take this class will be learning the correct finger positions for keyboarding, how to create a spreadsheet, how to use search engines for researching the World Wide Web and how to incorporate clip art into word processing programs. Students who complete this course will be meeting the state's technology benchmarks for 7th grade.

Health/PE 7 (1 semester)

Health education will cover topics of nutrition, drug and alcohol abuse, reproductive health, and communicable diseases. Some weeks will be spent doing physical activities to help promote a healthy mind and body.

Spanish 7 (1 semester)

Students will learn to understand and to say greetings, the alphabet numbers, days of the week, months of the year and seasons in addition to colors and vocabulary related to the family and the human body. Art projects, music, movies, dances and foods will add a cultural dimension to the course.

French 7 (1 semester)

Students will learn to understand and to say greetings, the alphabet numbers, days of the week, months of the year and seasons in addition to colors and vocabulary related to the family and the human body. Art projects, music, movies, dances and foods will add a cultural dimension to the course.

Theatre 7 (1 semester)

Students will be introduced to the world of theatre in this elective class. Activities such as creative dramatics, role-playing, and other techniques are utilized to assist with the development of self-confidence, imagination and cooperative skills.

Art 7 (1 semester)

This course will focus on key concepts of the elements and principles of art produced in worksheet and project form with emphasis on quality, understanding and technique improvements. Students will experiment primarily with two-dimensional art..

Industrial Arts 7 (1 semester)

Students will be introduced to woodworking by learning about tool use and care, operation of power equipment and safety rules in the woodshop. This class will be largely project-based.

Introduction to Computer Science (ICS) (1 semester)

Introduction to Computer Science (ICS) is a semester course where student team's work through modules to create an Android interface to solve a problem the team defines. Students learn fundamental computer science (CS) concepts using MIT App Inventor. The course aims to develop computational thinking and build student excitement. Several days in each module are targeted to build career awareness about computing skills in all fields and to improve students' cyber hygiene.

Project Lead the Way (PLTW) (1 semester)

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 while 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. Students also trace the history, development and influence of automation and robotics as they learn about mechanical systems, energy transfers, machine automation, and computer control systems.

String Orchestra 7 (full year)

Seventh Grade String Orchestra is open to any student that wishes to learn to play a stringed instrument. String Orchestra instruments include: violin, viola, cello and bass. Students will be encouraged to obtain their own instruments. Prior experience is not necessary. Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

Band 7 (full year)

Seventh grade band is open to instrumental music students who have successfully completed 6th grade band or by permission of the instructor. Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

Mixed Choir (full year)

7/8 grade choir is open to students who are serious about their music education. Students will strengthen their music reading skills (including rhythm-reading, solfege and sight-singing). Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

Advanced Computers (full year)

In advanced computers students will learn various types of software and technology. Some of the software that will be taught is Adobe Premiere, Adobe Photoshop, Adobe Sound Booth, Digital Juice, Teleprompt software, and Microsoft Office. The students will use computers, digital cameras, digital video cameras, a tricastor, tripods and camera booms. Instruction will be divided up into 10 sections. Each section will create a segment that is part of the weekly broadcast. This class will also create a video yearbook that will be available for purchase at the end of the school year. Students who take this class need to be creative and meet strict deadlines. This class will require students to have a personal flash drive.

8th Grade Course Offerings

Please note: **[HSC]** next to a course title indicates High School Credit will be awarded to students successfully passing that course.

English 8 (full year)

This is an integrated ELA course that combines the study of reading, writing, speaking, listening and viewing. The course reviews basic skills previously taught and introduces new grade-level concepts as required by the state. Students read and discuss both fiction and nonfiction of various lengths to improve reading skills and continue to write for a variety of purposes, using correct grammar and mechanics.

Accelerated English 8 (full year)

This class is intended for highly motivated 8th grade students who show a potential for performing at high levels of accomplishment and exhibit a strong capability in language arts. Reading, writing, speaking and listening are developed with an emphasis on the writing process and on skills learned in the 7th grade, but at a faster pace than in Regular English. To meet the expectations of the class, Accelerated English students will be expected to spend more time reading and writing outside of class. **Along with the textbooks and novels used in Regular English, Accelerated English students will read additional novels and will be required to do summer reading prior to the start of school in the fall.** During the first week of class, students must demonstrate knowledge of the summer reading to remain in Accelerated English. ***Eligibility for this class will be determined by achieving a MEAP score of at least a 2 in writing, and recommendation by the student's 7th grade English teacher.***

Science 8 (full year)

Eighth grade Science will continue studying the three (3) strands of science: Life, Physical and Earth. Study will focus on the classification and attributes of living things (protists to plants), the earth's natural resources, chemical change, attributes of sound and light, astronomy and the human body systems. Students will also review measurement and the scientific method.

US History 8 (full year)

This course introduces students to the history of the United States from the Articles of Confederation to the end of the 19th century. Using primary and secondary sources, they explore time and place in nineteenth century America. Beginning with the political and intellectual transformations that preceded the Articles of Confederation, students review the ideas and principles that form the basis of our constitutional republic. Students further their understanding of American government created during its first century.

Pre-Algebra (full year)

In the Pre-Algebra course, students will learn the mathematical skills and concepts that are identified as appropriate for eighth grade students by the Michigan Department of Education. The strands of algebra, geometry, and data and probability are the primary focus.

Algebra I (full year) [HSC]

Algebra I is the first course of mathematics for students at the high school level and will cover the Michigan Merit Curriculum high school content expectations for Algebra I. The course will emphasize the language and properties of algebra including linear equations; graphing relations and functions; analyzing and solving linear equations; solving linear systems of equations and inequalities; linear programming; polynomials; quadratics; exponential and logarithmic functions; real, rational, radical and complex number systems; factoring; and radical and rational functions.

Students can expect this class to be fast paced, requiring substantial study and time commitment beyond the classroom. Higher level reading/comprehension skills are important to succeed in this

course. Students who take (and pass) *Algebra* in the eighth grade are expected to take *Geometry* in ninth grade.

Students who enroll in Algebra I in 8th Grade will need to meet the following requirements:

- 1. Math Grade of B+ or above in Accelerated Math 7.**
- 2. Teacher recommendation is based on a student's strong work ethic, high motivation, and reading ability.**

Computers and Careers 8 (1 semester)

In this segment of the Explore program, students will build upon the computer skills learned in 7th grade. Students who take this course will gain proficiency in the use of the Microsoft Office Suite. Students will have opportunities to discover their career interests and aptitudes, followed by career investigations using a variety of resources. Upon completion of this course, students will have met the state's technology and career and employability skills benchmarks for 8th grade.

Advanced Computers (full year)

In advanced computers students will learn various types of software and technology. Some of the software that will be taught is Adobe Premiere, Adobe Photoshop, Adobe Sound Booth, Digital Juice, Teleprompt software, and Microsoft Office. The students will use computers, digital cameras, digital video cameras, a tricastor, tripods and camera booms. Instruction will be divided up into 10 sections. Each section will create a segment that is part of the weekly broadcast. This class will also create a video yearbook that will be available for purchase at the end of the school year. Students who take this class need to be creative and meet strict deadlines. This class will require students to have a personal flash drive.

Computer Essentials (1 semester) [0.5 HSC]

This is a fast-paced course and should be chosen only by students who need an introduction to computer software applications. Students will gain a proficiency in the use of Windows Applications and the Microsoft Office Suite, including Word, Excel and PowerPoint. Emphasis will be placed on integration between the Microsoft Office applications. **To continue in the Business Management Career pathway and/or to be eligible for Community Based Learning (CBL), a student must take BMA I-Management Support; however, this course will satisfy the computer literacy requirement for graduation.**

Theatre 8 (1 semester)

Students will build upon skills learned in Theatre 7 in this elective class. Activities such as creative dramatics, role-playing, and other techniques are utilized to assist with the development of self-confidence, imagination and cooperative skills.

Art 8 (1 semester)

This course will expand on two-dimensional knowledge with emphasis on individual improvement. Students will explore multimedia expression as well as three dimensional art.

Industrial Arts 8 (1 semester)

Students will be introduced to woodworking by learning about tool use and care, operation of power equipment and safety rules in the woodshop. This class will be largely project-based.

Physical Education 8 (1 semester)

The main emphasis of this course is competitive sports. Individual sports include tennis, paddleball, racquetball, badminton and archery. Team sports include floor hockey, basketball, volleyball, soccer, and softball.

Introduction to Computer Science (ICS) (1 semester)

Introduction to Computer Science (ICS) is a semester course where student team's work through modules to create an Android interface to solve a problem the team defines. Students learn fundamental computer science (CS) concepts using MIT App Inventor. The course aims to develop computational thinking and build student excitement. Several days in each module are targeted to build career awareness about computing skills in all fields and to improve students' cyber hygiene.

Project Lead the Way (PLTW) (1 semester)

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 while 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. Students also trace the history, development and influence of automation and robotics as they learn about mechanical systems, energy transfers, machine automation, and computer control systems.

Spanish I (full year) [HSC]

Spanish I is a beginning level class. Students learn basic Spanish vocabulary and the simple structures needed to speak or write about everyday situations. The vocabulary and grammar will help the student better understand English grammar and vocabulary, as well as provide the required basics for Spanish II. High school credit will be given if the student passes the class and necessary exams. The grade a student receives for this class will be transferred to the high school for credit. Students can elect to retake the class if necessary in 9th grade.

French I (full year) [HSC]

French I is a beginning level class. Students learn basic French vocabulary and the simple structures needed to speak or write about everyday situations. The vocabulary and grammar will help the student to better understand English grammar and vocabulary, as well as provide the required basics for French II. High school credit will be given if the student passes the class and necessary exams. The grade a student receives for this class will be transferred to the high school for credit. Students can elect to retake the class if necessary.

Band (full year)

Eighth grade band is open to instrumental music students who have successfully completed 7th grade band or by permission of the instructor. Students will be required to participate in rehearsals and performance outside the regular school day. Along with performance techniques, students will study music theory and history.

String Orchestra (full year)

Eighth Grade String Orchestra is open to any student that wishes to learn to play a stringed instrument. String Orchestra instruments include: violin, viola, cello and bass. Students will be encouraged to obtain their own instruments. Prior experience is not necessary. Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

Mixed Choir (full year)

Students will strengthen their music reading skills (including rhythm-reading, solfege and sight-singing). Students will be required to participate in rehearsals and performances outside the regular school day. Along with performance techniques, students will study music theory and history.

Math Lab (full year, required if recommended by teacher)

Math Lab is designed for those eighth grade students who qualify based on MEAP, STAR & performance criteria for additional time and support with the key foundational math concepts in *Pre-Algebra*. A hands-on approach will be used to review operations with integers and fractions, to find factors and multiples, and to solidify work with ratios, percents, and proportions as needed to support students in their learning of the 8th Grade topics within the strands of algebra, geometry, and data. Math lab is intended to better prepare students for success in 9th Grade *Algebra I*.

A.C.R.I (Adolescent Critical Reading Initiative)—Reading Intervention

This course focuses on understanding expository text, while reading at the student's reading level. The course also focuses on improving reading comprehension as well as improving a student's ability to navigate expository text. In addition to this, the student will participate in a Q.R.I (Qualitative Reading Intervention) assessment to track his/her progress. THIS COURSE REQUIRES ADMINISTRATION APPROVAL TO REGISTER.