



Altoona Middle School

8th Grade Course Description Handbook

2020-2021

REQUIRED COURSES

American History – Every day all year

Eighth grade American History is a detailed exploration of our nation's past from the events precipitating the American Revolution until the end of Reconstruction. AMS Students will do so using a variety of primary and secondary sources to interpret the historical context, audience, purpose, point of view to draw conclusions. Further analysis will examine 9-11, the Declaration of Independence, the US Constitution, our Bill of Rights and Supreme Court cases to identify and analyze democratic principles and ideals while examining and interpreting rights, privileges, and responsibilities in society. Additional activities will have our students initiate an inquiry, gathering evidence, evaluating sources, and developing claims using evidence to support reasoning concerning the Lewis and Clark expedition, Westward Movement and the Civil war. Throughout the year we will also be requiring students to use geographic tools to analyze the world around us as well as the economic interdependence of nations.

Algebra – Every day all year

This course uses *Core Connections Algebra* and is the first course in a five-year sequence of college preparatory mathematics courses that start with Algebra I and continues through Calculus. The goal is to deepen and extend student understanding built in previous courses by focusing on developing fluency with solving linear equations, inequalities, and exponential functions graphically, numerically, symbolically, and as sequences, and by using regression techniques to analyze the fit of models to distributions of data. This course is well balanced among procedural fluency (algorithms and basic skills), deep conceptual understanding, strategic competence (problem solving), and adaptive reasoning (extensions and application.) Though more will be covered over the course of the year, the following essential standards/skills are what every student must master in order to be considered minimally proficient in this course: Functions, Linear Relationships, Simplifying and Solving Expressions and Equations, Systems of Equations, Sequences, Modeling Two-Variable Data, Exponential Functions, Quadratic Functions, Solving Quadratics and Inequalities, Solving Complex Equations, and Functions and Data. Study Teams are used in this class to learn or do work, while assessments focus on the individual. Student will earn a High School Math credit with this course.

Earth Science – Every day all year

Earth Science is the study of the Earth's processes and history. Topics include: Matter, Minerals, Rocks and Rock Cycle, Earth's Energy Resources, Views of the Earth, Weathering and Erosion, Plate Tectonics, Geologic Time, and Earth History (Fossils, Relative, and Radiometric Sequencing of Events). The emphasis of this course is on the scientific process through the study of Earth Science and the topics listed above. Students collect data, analyze and interpret the data, and report their findings through a formal scientific lab report using the CER format (claim, evidence, and reasoning). This study will continue through the first semester of 9th grade with emphasis on the Earth's relation to the universe.

English Language Arts – Every day all year

The eighth grade ELA curriculum focuses on the art of writing. Students read and analyze mentor texts and samples of high level writing in order to incorporate those writing moves and techniques into their own pieces. Emphasis is placed on creating narrative, informative, argumentative, and creative writing pieces. Grammar and conventions lessons are taught throughout the year. Students write poetry, personal narratives, debates, talk show scripts, photo essay narratives, reflective responses, letters, newspaper articles, and a variety of other genres of writing.

Literature – Every day all year

Literature (Reading) class will focus on students' growth in the areas of reading, listening, speaking, discussion, and reflection. Reading strategies, critical thinking skills, citing text evidence, and vocabulary building will be the focus. A variety of novels, short stories, and magazines that are fiction, nonfiction, and poetry will be used to practice reading strategies and comprehension skills. The overall goal of the class is to increase the literacy and writing ability of all students. Some topics will be Believing in Yourself!, Differences are what makes us Unique, The Outsider's Novel Unit, Holocaust Novel Unit, Social Media Unit using Scholastic Teen Choices Magazine, Poetry Unit, and Student Choice Novel Unit.

Math – Every day all year

Eighth grade math uses *Core Connections Course 3* and is designed to prepare students for a rigorous college preparatory algebra course. It uses a problem-based approach with concrete models. The course helps students develop multiple strategies to solve problems and to recognize the connections between concepts. Though more will be covered over the course of the year, the following essential standards/skills are what every student must master in order to be considered minimally proficient in this course: Problem Solving, Simplifying with Variables, Graphs and Equations, Multiple Representations, Systems of Equations, Transformations and Similarity, Slope and Association, Exponents and Functions, Angles and the Pythagorean Theorem, Surface Area and Volume. Study Teams are used in this class to learn or do work, while assessments focus on the individual.

Media Literacy – Every day all year

Students will understand how to become Media Literate and Media Smart by having the ability to read many types of media which has become an essential skill in the 21st Century. Media literacy is the ability to access, analyze, evaluate, and create media. Media literate youth and adults are better able to understand the complex messages we receive from television, radio, the Internet, newspapers, magazines, books, billboards, video games, music, and all other forms of media. Media literacy skills that will be taught throughout the unit include but not limited to: Develop critical thinking skills, understand how media messages shape our culture and society, identify target marketing strategies, recognize what the media maker wants us to believe or do, recognize bias, spin, misinformation, and lies, evaluate media messages based on our own experiences, skills, beliefs, and values, create and distribute our own media messages. Units included: History of print media, broadcasting, radio, advertising, social media, and finally understanding bias, stereotypes, and misrepresentations.

Physical Education – Every other day all year

Students will be introduced to a variety of fitness based warm-ups, followed by the specific unit activities and skill work. The following units will be taught throughout the year if time permits; net games (volleyball, team handball, tchoukball, lacrosse, tennis, badminton) invasion games (basketball, floor hockey, flag football, soccer), fitness (fitness testing, weight room), outdoor recreation (snowshoeing, cross country skiing, disc golf, archery, golf), and team

building. Students will be expected to work well with a team/partner setting as well as perform the necessary skills to be successful in the units.

PIE (Prevention/Intervention/Enrichment)

This non-graded course provides students an opportunity for additional review and instruction in the areas of math and ELA helping them stay on track. This time also serves as an opportunity to work on homework and receive additional assistance from teachers. In addition, this course also provides our students an array of enrichment and school-community activities helping stretch the minds of our students in unique ways as well as continuing to teach and review what it means to have great character and be a good citizen.

TRANSMATH – Every day all year

Transmath is a balanced mathematics class that provides students with opportunities to develop skills in mathematics computation, application, problem solving, and conceptual understanding that will prepare them for the college preparatory mathematics courses in high school. The course will provide sequential and structured opportunities for students. Students will learn skills that will enable them to solve a variety of mathematics problems in both written and numeric forms.

ELECTIVE COURSES – Every other day all year

Advanced Tech Ed ELECTIVE

This is a relatively new class that focuses on taking the design process, the new technology in the FabLab and going more in depth to create a more personalized and community service approach to projects. We will design and create personalized phone holders as well as make vinyl designs. We will also have engineering challenges and wood shop projects. Students will use the laser engraver, vinyl machine, high school woodshop, and various other machines to advance their skills and knowledge of today's technology.

Band ELECTIVE

How can students develop the skills to become a lifelong musician? 7th and 8th Grade Band is the ensemble that students become a part of after the year of 6th Grade Band. In this course, students will further develop their technical and musical skills on their instruments. A strong emphasis on fundamental skills and technique development will be taught throughout the year. The repertoire of music that students play will be more advanced than that of the beginning band. Some evening performances are required for this course. Students should practice outside of the school day to help develop performance skills and enhance the cultural life of the community.

Ceramics and Sculpture ELECTIVE

Three-dimensional art occupies space defined through the dimensions of height, width and depth. This class will look at three-dimensional works of art, the methods an artist used to create the three-dimensional piece, and the history of the time that shaped the artist's work. Students will complete their own works of art using a variety of techniques and problem solving skills. Techniques that may be used to create these works of art may include modeling, carving, assemblage and paper folding. Materials to complete the projects may include clay, plaster, wood, Paper Mache, plastics, Styrofoam, paper, and other materials depending on the three-dimensional art project. A field trip to the Minneapolis Art Institute culminates this class.

Choir ELECTIVE *Required if participating in Show Choir

We've all heard talented singers, but did you know much of this talent boils down to hard work and an understanding of how the voice works? 7th and 8th grade choir is the next step in the journey as a choral musician. Building off of musical skills from 6th grade choir as well as the other music offerings, this choir learns and performs more advanced music and sings different types of music from around the world. In choir, students will continue to learn the skills to improve vocal health, master reading music, and understanding the many different aspects of music through game-based learning. In this choir, students will begin to work on music literature with three to four voice parts and place a greater emphasis on acapella (singing without accompaniment) music. Small group and solo opportunities are available as well. All students are welcome, regardless of previous experience, though previous experience in choir is preferred. Some evening performances are required for this course to support the development and enjoyment of music not only as a listener, but also as a performer.

Creative Entertainment in Pop Culture ELECTIVE

Music is a vital part of American culture. In this class, students will look at the popular music that we listen to in our country, including rock, pop, country, and rap. Students will learn how to mix their own music, as well as create a podcast. Students will also analyze music in movies and television, and create our own soundtracks and music videos. There are no required performances. A love of music on the radio is all that is required!

Drawing and Painting ELECTIVE

Two-dimensional art consists of a composition which occupies length and width such as paintings, drawings, prints, and photographs. Students will learn about the artists and cultures that contribute to our rich global artistic heritage and the two-dimensional works of art that they have created. Students will learn to use the basic materials and techniques for creating two-dimensional works of art. Students will also learn to analyze and critique the works of art and the artists who made them to develop an appreciation and love for art.

Techniques students may use are printmaking, collage and many other exciting mediums. Materials used to complete the projects may include acrylic, tempera and watercolor paints, oil and chalk pastels, colored pencils, or pen and ink. A field trip to the Minneapolis Art Institute culminates this class.

FABulous FabLab ELECTIVE

Utilize the awesome software and machines in the FabLab, along with your creativity and hard work, to create unique projects. We will be learning to create projects in a solid modeling program to 3D print or to create sliced cardboard creations using the laser engraver. We will create stickers and vinyl heat press t-shirts as well as posters. We will also use machines and equipment to design and create a LED night light and your own personal stamp.

Introduction to Guitar ELECTIVE

What better way to enjoy music than by learning to play the guitar! In this introductory course, students will identify the parts of the guitar and learn how to tune a guitar. Along with that, students will learn how to read guitar sheet music and transcribe tablature into music. By the end of this course, students will have learned the basic skills needed to play the guitar. Guitars will be provided, but students may choose to bring their own. (Please no amplifiers.) Some additional fees may be required for registration.

JASON Project ELECTIVE

Eighth grade enrichment class designed to immerse students in up to date real world science through studying and creating connections in current topics such as climate change. It is designed to motivate and inspire students with interests in science, technology, engineering, and mathematics. This unique course will not be listed on the registration card. Rather, students will have the opportunity to sign up for this course at a different time.

Manufacturing & Design ELECTIVE

Create hands on projects using the awesome machines in the FabLab as well as the traditional shop machines such as band saws and drill presses. We will design and create CO2 cars, model rockets, 3D models, triangle golf tee game, Superclip, and learn about inventions.

Media Production ELECTIVE

In today's world, media has become an essential part of our lives. It plays an incredible role in shaping the information and knowledge that is shared every day and everywhere. In the Media Production class, students will continue to develop the skills of empowered learners by being innovative and creative designers, problem solvers and communicators. The learning and application of a variety of media production skills could include: podcasts, stop motion, green screen, video editing, website design, infographics, digital graphics/marketing, social media and more. In culmination, students will develop a project in partnership with an organization that is school or community-based. The goal of this project is to assist this organization in sharing their message and information through media production and social media.

Spanish I B ELECTIVE

Students who completed Spanish I A in 7th grade will take Spanish I B in 8th grade. This will allow them to enter high school and take Spanish II as freshman! Spanish I B will build upon content from Spanish I A. Students will continue to participate in reading, writing, speaking, and listening activities to improve their language proficiency. Students will continue to research, complete projects, presentations, and in-class activities to practice Spanish and learn more about the Latino culture. Middle school students signing up for Spanish I B must realize the curriculum is at the same rigorous pace as it is for high school students. It is a fun, yet fast-paced learning atmosphere. Get ready to learn new and exciting things as a student in Spanish II B! ¡Olé!

Why Wellness? ELECTIVE

This is a hands-on, project-based course digging deeper into the topics of mental health, alcohol and other drug abuse, nutrition, and healthy relationships. We will apply the concept of wellness to each topic. This course is for those who wish to grow deeper in their wellness journey.

Extra-Curricular Activities

The following Clubs/Activities/Athletics are available to 7th grade students:

Fall Athletics: Cross Country, Girls Tennis, Football, Volleyball, Boys Soccer

Winter Athletics: Wrestling, Boys Basketball, Girls Basketball

Spring Athletics: Boys Tennis, Track & Field, Girls Soccer

Clubs/Activities:

Mathcounts, In Training Show Choir, Yearbook, Art Club, Forensics, Student Council, Dungeon & Dragons